

## UNDERGRADUATE ACADEMIC CATALOG 2018-2019

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## A MESSAGE FROM THE PRESIDENT



## Welcome!

I am thankful that you have decided to become part of the Oklahoma Christian University family! There is no better place to launch your career and lifelong service to the Kingdom.

You will find our Christian campus environment to be welcoming and friendly, a place you can proudly call home while you earn a highly respected academic degree. Everyone at OC - our outstanding faculty, dedicated staff, and your fellow students - is committed to ensuring that you have a wonderful, rewarding experience just like thousands of students before you.

OC is my home. And that's the experience we want you to have here. Home is where you learn, grow, connect with others, and take some risks. Home doesn't prepare you to stay there. It prepares you for life, to be able to go out into the world and succeed. And that's the experience we want you to have here. You will leave OC well prepared academically, socially, and spiritually for an effective life of service to your family, your profession, your community, and your church. And someday, when you long to return home, we want you to know that you'll always be welcomed at your alma mater.

You will, of course, get out of your experience at Oklahoma Christian exactly what you put into it. We encourage you to work hard. Our academic programs are rigorous. Your professors are well qualified and are here to help you achieve your academic objectives. They will go beyond the call of duty to ensure you succeed.

We hope you will also take advantage of the myriad of Oklahoma Christian offerings and activities. Whether you're bonding with fellow students in academic or social service clubs, supporting our excellent intercollegiate athletic teams, participating in intramural sports, enjoying regular Bible studies and working on mission and ministry campaigns through our Ethos spiritual life program, participating in professional internships throughout the Oklahoma City area, or studying and seeing the world while living at Das Millicanhaus, OC's Vienna, Austria campus, you will find these activities and others will enrich your OC experience and make you a more rounded student.

Again, welcome to Oklahoma Christian. Welcome Home!


John deSteiguer

## A MESSAGE FROM THE CHIEF ACADEMIC OFFICER



Welcome! You know that OC truly is home to many alumni, thousands of students, and hundreds of employees who care about "your growth in 'heart, soul, mind, and strength.'" You will hear this phrase on campus. It is familiar to you because Scripture describes our pursuit of God this way in Mark 12 and Deuteronomy 6, to name only two instances.

This university catalog includes or refers to many elements of OC's operations, but it is at heart an academic document - describing how OC's many colleges, schools, departments, and programs offer a wide range of courses, majors, minors, and tracks designed to help you reach the high goals for which you have chosen a selective university. Go to class. Come by our offices. Invest in your education. Please pay careful attention to these details provided to help you graduate on time and with the success you're seeking.

Now that you're in college, this catalog also describes a vibrant culture with new words and things you will learn about - co-curriculum, internships, practicum, capstone, studies abroad, service learning, and others. All this is curated by mentors who choose activities, standards, and best practices that are time-tested to help you grow. Whether in a dorm, in a classroom, online, off campus, or in an athletic competition, each program organizes these rich choices into a purposeful pathway suited to your goals.

Become part of this faith-filled community of higher learning at OC - a place where we seek knowledge and wisdom; understand cutting-edge information and develop the perspective to use it well; invest in close friendships; and embrace the world through travel, study, and service. We welcome the world into our campus home. This global community is based on Jesus' words in Mark 12:31 that the second great command is to 'Love your neighbor.' Our global university community values integrity, transparency, and a faith-centered mission. We have high hopes for you; we have expectations of you, too. This document describes many of those. Above all, this community seeks to honor each person's unique and God-given calling to live a life of greater purpose and meaning.

To new students, we urge you to enter fully into this community. Get involved. Invest your time, mindshare, and energy. Fully involved students are those who grow fastest. Now is the time to join in! From your first day in our Academic Welcome with its traditional Salt and Light ceremony until your graduation day four years later with all its pomp and circumstance, every event is designed with your learning, growth, and professional placement in mind.

Our academic reputation is built on national accreditations, exceptional faculty, and high rankings, which reveal that OC is a teaching and learning environment seeking the well-being of every student. When you hear a program is in the top 25 in the nation or leads in number of top awards in a field, believe it! We work to sustain and to continuously improve every academic area or program provided. Seek mentoring and develop your relationships with the amazing teaching scholars who lead these programs.

Welcome home and to the opportunity to fully involve yourself in this Christ-centered community of higher learning.

Scott LaMascus, Ph.D.

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Broken Bow, Oklahoma
Phil S. Winn
Branson, Missouri

## OFFICERS

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President
B.A., Northeastern State University
J.D., Pepperdine University

Jeff Dimick (2018)
Chief Operations Officer
B.S., Oklahoma Christian University
M.S., Oklahoma State University

Bill Goad (1979)
Chief Analytics and Planning Officer
Chief Financial Officer
B.S., Oklahoma Christian University
M.B.A., Abilene Christian University

Ed.D., Oklahoma State University
Scott LaMascus (1999)
Chief Academic Officer
Professor of English
B.A., Oklahoma Christian University
M.A., University of Oklahoma

Ph.D., University of Oklahoma
2003 Gaylord Chair of Distinguished Teaching

Neil Arter (1990)
Chief Student Life Officer
Dean of Students
B.S., Oklahoma Christian University
M.B.A., Oklahoma Christian University

John Hermes (1993)
Chief Technology and Campus Operations Officer
B.S., Oklahoma Christian University
M.S., Oklahoma State University

Risa Forrester (1996)
Chief Admissions and Marketing Officer
B.A., Oklahoma Christian University
M.Ed., Azusa Pacific University

Stephen Eck (2000)
Chief Legal Officer
A.A., York College
B.A., Oklahoma Christian University
M.B.A., MidAmerica Nazarene University
J.D., Oklahoma City University

Cami Agan (1997)
Professor of English
B.A., Oklahoma Christian University
M.A., Boston College

Ph.D., Duquesne University
Sara Alcon (2015)
Assistant Professor of Biology
B.S., Oklahoma Christian University

Ph.D., University of New Mexico

## Christopher Austin (2008)

Associate Professor of Physics
B.S., Oklahoma Christian University

Ph.D., Oklahoma State University
2016 Gaylord Chair of Distinguished Teaching

## Jim Baird (1992)

Director, Honors Program
Distinguished Professor of Bible and Philosophy
B.A., Oklahoma Christian University
M.Div., Harding Graduate School
D.Phil. (Oxon.), Oxford University

2001 Gaylord Chair of Distinguished Teaching

## Alden Bass (2017)

Assistant Professor of Bible
B.A., Yale University
M.T.S., Vanderbilt Divinity School

Ph.D., St. Louis University
Amy Beauchamp (2005)
Assistant Professor of Art and Design
B.S., Oklahoma Christian University
M.F.A., University of Central Oklahoma

Kenneth S. Bell (2011)
Assistant Professor of Electrical and Computer
Engineering
B.S., University of Connecticut
M.S., University of Connecticut

## Jeffrey Bigelow (1994)

Chair, Department of Electrical and Computer Engineering
Professor of Electrical and Computer Engineering B.S., Colorado State University
M.S., University of Illinois at Urbana

Ph.D., University of Illinois at Urbana

## Clay Bowman (2018)

Instructor of Physics
B.S., University of Science and Arts of Oklahoma

Elayne Bowman (2015)
Associate Professor of Education
B.S.E., Oklahoma Christian University
M.Ed., University of Oklahoma

Ph.D., University of Oklahoma
Sid Brown (2018)
Distinguished Visiting Professor of Criminal Justice
B.A., Central State University
M.A., Central State University
J.D., Oklahoma City University

Hannah Bingham Brunner (2016)
Visiting Instructor of English
B.A., Oklahoma Christian University
M.A., Iowa State University

Jennifer Bryan (2003)
Chair, Department of Mathematics
Professor of Mathematics
B.S., Oklahoma Christian University
M.S., Oklahoma State University

Ph.D., Oklahoma State University
Bradley J. Buxton (2014)
Assistant Professor of Mechanical Engineering
B.S., Embry-Riddle Aeronautical University
M.S., Troy State University
M.S., Air Force Institute of Technology

Robert Carpenter (1998)
Professor of Missions
B.A., Princeton University
M.A., Stanford University
M.A., Abilene Christian University

Ph.D., University of California at Santa Barbara
Allison Cassady (2011)
Associate Professor of Education
B.S., Texas A\&M University
M.Ed., Texas A\&M University

Ph.D., University of Texas
David Cassel (1995)
Professor of Mechanical Engineering
B.S.M.E., Louisiana Tech University
M.S.M.E., Louisiana Tech University

Ph.D., Georgia Institute of Technology
Dudley Chancey (1998)
Professor of Youth Ministry
A.A., Albany Junior College
B.S., Tennessee Technological University
M.S., Abilene Christian University

Ph.D., University of Tennessee
Curtis Coleman (2018)
Visiting Assistant Professor of Computer Science
B.S., California State University
M.S., Norwich University

Ph.D. candidate, Nova Southeastern University
Eric Colgrove (2017)
Instructor of Music
B.M.E., Harding University
M.M., Colorado State University
J.J. Compton (2002)

Associate Professor of Library Science
B.A., Oklahoma Christian University
M.L.I.S., University of Oklahoma

Mickey Cowan (2000)
Professor of Accounting
B.S., Oklahoma State University
M.S., Oklahoma State University

David Crismon (1991)
Professor of Art and Design
B.F.A., Kansas Art Institute
M.F.A., University of Oklahoma

2006 Gaylord Chair of Distinguished Teaching
Donald V. Drew (2000)
Professor of Business
B.A., Oklahoma Christian University
M.H.R., University of Oklahoma

Ed.D., Oklahoma State University
Kelli Dudley (2013)
Instructor of Education
B.S., Oklahoma State University
M.S.Ed., University of Central Oklahoma

James Dvorak (2008)
Associate Dean for Teaching and Learning
Chair, Graduate School of Theology
Professor of Bible
B.A., Oklahoma Christian University
M.Div., Trinity Evangelical Divinity School
M.A., George Washington University

Ph.D., McMaster Divinity College
John Fletcher (1987)
Associate Dean, College of Liberal Arts
Professor of Music
B.A., Oklahoma Christian University
M.M., University of Missouri
D.M.A., University of Oklahoma

2010 Gaylord Chair of Distinguished Teaching

Joanie Gieger (2014)
Visiting Instructor of Education
B.S.E., Oklahoma Christian University
M.S.Ed., University of Central Oklahoma

Jennifer Gray (2015)
Associate Dean, Division of Health Sciences
Chair, School of Nursing
Professor of Nursing
B.S.N., Central State University
M.S.N., University of Texas at Arlington

Ph.D., Texas Women's University
Christy Hallock (2013)
Assistant Professor of Nursing
B.S.N., Oklahoma Christian University
M.S.N., University of Oklahoma

## Andy Harbert (1997)

Chair, Department of Computer Science
Assistant Professor of Computer Science
B.S., Louisiana State University
M.S., Texas A\&M University

John Harrison (2000)
Professor of New Testament and Ministry
B.A., David Lipscomb University
M.A., Wheaton Graduate School

Ph.D., University of Edinburgh
Dawn Hemphill (2018)
Assistant Professor of Nursing
B.S.N., University of Central Oklahoma
M.S.N., Regis University

Shawna Hood (2007)
Assistant Professor of Nursing
B.S., University of Central Oklahoma
M.S., Midwestern State University

Paul Howard (2002)
Professor of Mathematics
B.S., University of Idaho
M.S., University of Idaho

Ph.D., University of Oklahoma
Paul House (2017)
Associate Professor of Exercise Science
B.S., Oklahoma Christian University
M.S., University of Oklahoma

Ph.D., Oklahoma State University
Jonathan Hunt (2017)
Assistant Professor of Biology
B.S., Oklahoma Christian University
M.S., University of Oklahoma Health Sciences Center

Ph.D., University of Oklahoma Health Sciences Center
Paula Hutton (1993)
Associate Professor of Music
B.M., University of New Mexico
M.M.E., University of Central Oklahoma

Ph.D., University of Oklahoma
Craig Johnson (2005)
Professor of Mathematics
B.S., Harding University
M.S., University of Mississippi

Ph.D., Wayne State University
Kenneth Johnson (2002)
Chair, Graduate School of Business
Associate Professor of Accounting
B.S., Oklahoma State University
M.B.A., University of Central Oklahoma
D.B.A., Argosy University

Heath Jones (2001)
Chair, Department of Music
Professor of Music
B.M.E., Oklahoma Christian University
M.M., Baylor University

Ph.D., University of Oklahoma

Jody Jones (2006)
Professor of Finance
B.S., Oklahoma Wesleyan University
M.B.A., Oklahoma City University

Ed.D., Oklahoma State University
David Jurney (2012)
Instructor of Communication
B.A., Oklahoma Christian University
M.B.A., Oklahoma Christian University

Larry Jurney (1985)
Chair, Interdisciplinary Studies
Professor of Mass Communication
B.A., David Lipscomb University
M.A., University of Tennessee

Ph.D., University of Michigan
2015 Gaylord Chair of Distinguished Teaching
Elaine Kelly (1992)
Associate Dean, College of Business Administration
Associate Professor of Accounting
B.S., East Central University
M.B.A., University of Central Oklahoma

1999 Gaylord Chair of Distinguished Teaching
2006 JJ Millican Chair of Accounting
Bobby L. Kern (2012)
Associate Professor of Psychology and Family Science
B.S., Oklahoma Christian University
M.A., Oklahoma Christian University

Ph.D., Oklahoma State University
Chip Kooi (2001)
Professor of Bible
B.A., Oklahoma Christian University
M.A., Oklahoma Christian University

Ph.D., Baylor University
Scott LaMascus (1999)
Chief Academic Officer
Professor of English
B.A., Oklahoma Christian University
M.A., University of Oklahoma

Ph.D., University of Oklahoma
2003 Gaylord Chair of Distinguished Teaching
Rhea Ann Lee (2014)
Instructor of Nursing
B.S.N., University of Central Oklahoma
M.S.N., Oklahoma Baptist University

Donald Leftwich (1979)
Associate Professor of Mathematics and Computer Science B.S., Oklahoma Christian University
M.A., University of Oklahoma

Phil Lewis (1999)
Professor of Business
B.S., Abilene Christian University
M.A., University of Denver

Ed.D., University of Houston
Gary Lindsey (2009)
Professor of History
B.Arch., Texas Tech University
M.A., Abilene Christian University

Ph.D., Texas Tech University
Lindsey Long (2017)
Visiting Assistant Professor of Biology
B.S., Oklahoma Christian University

Ph.D., Colorado State University
David Lowry (2005)
Professor of Communication
B.S., Abilene Christian University
M.S., Abilene Christian University

Ph.D., University of North Texas
William Luttrell (2005)
Professor of Chemistry
B.S., University of Louisville
M.S., Old Dominion University

Ph.D., Eastern Virginia Medical School and Old Dominion University

## Steven P. Maher (2002)

Associate Professor of Electrical and Computer Engineering
B.S.E.E., University of Kansas
M.S.E.E., University of Kansas

John Maple (1977)
Chair, Department of History and Political Science
Distinguished Professor of History
B.A., Oklahoma Christian University
M.A., University of Virginia
M.Phil., University of Kansas

Ph.D., University of Kansas
1991 Gaylord Chair of Distinguished Teaching

## Darin Martin (2005)

Chair, School of Education
Professor of Education
B.A., Harding University
M.Ed., Harding University

Ed.D., Oklahoma State University
Jeffrey McCormack (2014)
Dean, College of Natural and Health Sciences
Lawson Professor of Microbiology and Immunology
B.S., Oklahoma Christian Univesity
M.S., University of Oklahoma Health Sciences Center

Ph.D., University of Oklahoma Health Sciences Center
Matt McCook (2002)
Professor of History
B.S., Abilene Christian University
M.A., Sam Houston State University

Ph.D., Florida State University
Courtney McCoy (2014)
Assistant Professor of Nursing
B.S.N., Oklahoma Christian University
M.S.N., University of Oklahoma

Wes McKinzie (2017)
Instructor of Business
B.S., Oklahoma Christian University
M.A., University of Oklahoma

Lynn McMillon (1966)
Distinguished Professor of Bible
B.A., Oklahoma Christian University
M.A., Harding Graduate School of Religion
M.Th., Harding Graduate School of Religion

Ph.D., Baylor University
1985 Gaylord Chair of Distinguished Teaching
Kimberly Merritt (2007)
Professor of Business
B.S., Oklahoma State University
M.B.A., Cameron University
D.B.A., Argosy University

## AI Mikell (2006)

Professor of Biology
B.S., University of Alabama
B.S., University of Alabama at Birmingham
M.S., Auburn University

Ph.D., Virginia Tech University
Travis Montgomery (2015)
Associate Professor of English
B.A., Oklahoma Christian University
M.A., University of Mississippi

Ph.D., University of Mississippi
Monica Muza (2005)
Instructor of Mathematics
B.S.E., University of Central Oklahoma
M.S., University of Central Oklahoma
M.B.A., Oklahoma Christian University

Gail Nash (1998)
Chair, Department of Language and Literature
Associate Professor of English
B.A., Oklahoma Christian University
M.A., Oklahoma State University

Ph.D., Oklahoma State University
2013 Gaylord Chair of Distinguished Teaching

Byron Newberry (2001)
Dean, College of Engineering and Computer Science
Professor of Mechanical Engineering
B.S.M.E., Oklahoma Christian University
M.S.M.E., University of Michigan

Ph.D., University of Michigan
Ryan Newell (1992)
Chair, Department of Psychology and Family Science
Professor of Psychology
A.A., Ohio Valley College
B.S., Oklahoma Christian University
M.Ed., University of Central Oklahoma

Ph.D., University of Toledo
Amanda Nichols (2008)
Associate Dean, Division of Natural Sciences
Associate Professor of Chemistry
B.S., Oklahoma Christian University

Ph.D., Oklahoma State University
Robert Nix (2015)
Assistant Professor of Computer Science
B.S., Oklahoma Christian University
M.S., The University of Texas at Dallas

Ph.D., The University of Texas at Dallas
David North (2015)
Associate Professor of Computer Science
B.S., Oklahoma Christian University
M.S., University of Oklahoma

Michael O'Keefe (1981)
Professor of Art and Design
B.A., Harding University
B.S., Harding University
M.F.A., University of North Texas

Becky O'Neal (2009)
Assistant Professor of Nursing
B.S., University of Central Oklahoma
M.S., University of Oklahoma

## Trey Orndorff (2018)

Associate Professor of Political Science
B.S., Northern Kentucky University
M.A., Miami University

Ph.D., Miami University
John Osborne (2000)
Director, International Programs
Assistant Professor of Communication
B.S., Oklahoma Christian University
M.B.A., Oklahoma Christian University

Philip Patterson (1981)
Distinguished Professor of Communication
Advisor, The Talon
B.A., Lubbock Christian University
M.A., Abilene Christian University

Ph.D., University of Oklahoma
1988 Gaylord Chair of Distinguished Teaching
Savannah Phillips (2017)
Instructor of Nursing
B.S.N., Oklahoma Christian University
M.S.N., Fort Hays State University

Kevin G. Plumlee (2012)
Chair, Department of Mechanical Engineering
Assistant Professor of Mechanical Engineering
B.S., Oklahoma Christian University
M.S., Texas A\&M University

Ph.D., Texas A\&M University
Jeff Price (2009)
Chair, Department of Art and Design
Professor of Art and Design
B.F.A., University of Oklahoma
M.F.A., Virginia Commonweath University

2014 Gaylord Chair of Distinguished Teaching
Lindsay Prugh (2008)
Assistant Professor of Mathematics
B.S., Oklahoma Christian University
M.S., University of Central Oklahoma

Ph.D., University of Oklahoma

Kyle R. Pullen (2012)
Professor of Music
B.S., University of Houston
M.S., University of Houston

Ph.D., Claremont Graduate University
Arisoa Randriansolo (2018)
Associate Professor of Computer Science
B.S., Abilene Christian University
M.S.,Texas Tech University

Ph.D., Texas Tech University

## Trevy Rauch (2016)

Instructor of Nursing
B.S.N., University of Oklahoma Health Sciences Center M.S.N., University of Oklahoma Health Sciences Center

Charles Rix (2011)
Dean, College of Biblical Studies
Associate Professor of Bible
B.B.A., Abilene Christian University
M.I.M., Thunderbird School of Global Management
M.T.T., New Brunswick Theological Seminary
M.Phil., Drew University

Ph.D., Drew University
Kerianne Roper (2004)
Professor of Business
B.S., Oklahoma Christian University
M.B.A., University of Oklahoma
D.B.A., Anderson University

Chris Rosser (2009)
Associate Professor of Library Science
Theological Librarian
B.S., Oklahoma Christian University
M.L.I.S., University of Oklahoma
M.Div., Oklahoma Christian University

William W. Ryan (2001)
Professor of Engineering Sciences
B.A., California State College
M.A., Sam Houston State College

Ph.D., University of Texas
Beth Scott (2006)
Assistant Professor of Nursing
B.S., University of Central Oklahoma
M.S.N., University of Oklahoma Health Sciences Center

Nathan Shank (2014)
Assistant Professor of English
B.A., Harding University
M.A., University of Oklahoma

Ph.D., University of Kentucky
Brian Simmons (2014)
Chair, Department of Communication
Professor of Communication and Honors
B.S., Oklahoma Christian College
M.A., Pepperdine University

Ph.D., Purdue University
2018 Gaylord Chair of Distinguished Teaching

Jeffery Simmons (2008)
Dean, College of Business Administration
Professor of Business
B.S., Oklahoma Christian University
M.I.M., Thunderbird School of Global Management
D.B.A., Nova Southeastern University

Burton Smith (2003)
Professor of Marketing
B.S., Oklahoma State University
M.S., Oklahoma State University

Ed.D., Oklahoma State University
2009 Gaylord Chair of Distinguished Teaching

## Pat Smith (2006)

Associate Professor of Electrical and Computer Engineering
B.S., University of Oklahoma
M.S., Colorado State University

2017 Gaylord Chair of Distinguished Teaching
Daniel Sorensen (2011)
Associate Professor of Accounting
B.A., University of Nebraska
M.B.A., Vanderbilt University
D.B.A., Anderson University

Grant Testut (2011)
Associate Professor of Bible
B.A., David Lipscomb University
M.Ph., Hebrew Union College

Ph.D., Hebrew Union College
Dara Tinius (2009)
Assistant Professor of Library Science
B.A., Oklahoma Christian University
M.L.S., University of Oklahoma

Howard Vogel (2005)
Professor of Chemistry
B.S., University of Texas

Ph.D., Texas Tech University
David Waldo (1996)
Professor of Electrical and Computer Engineering
B.S., Texas A\&M University

Ph.D., Drexel University
Tina Ware (1998)
Professor of Spanish
B.A., Baylor University
M.A., Baylor University

Ph.D., Texas Tech University
Josh Watson (2008)
Assistant Professor of Communication
B.A., Freed Hardeman University
M.A., East Tennessee State University

Ph.D. candidate, University of Oklahoma
W. Joe Watson (1989)

Professor of Electrical and Computer Engineering
B.S.E.E., Oklahoma State University
M.S.E.E., Oklahoma State University

Paul W. (Wayne) Whaley (1989)
Professor of Mechanical Engineering
B.S., Oklahoma State University
M.S., Oklahoma State University

Ph.D., Oklahoma State University
Tamie Willis (1986)
Director of the Library
Professor of Library Science
Periodical Research Librarian
B.S., West Texas State University
B.S.E., University of Central Oklahoma
M.L.S., University of Oklahoma

Tina Winn (2010)
Dean, College of Liberal Arts
Professor of Psychology
B.S., Oklahoma Christian University
M.Ed., Northwestern State University

Ed.D., Oklahoma State University
Debra Wood (2015)
Assistant Professor of Mechanical Engineering
B.S.M.E., Oklahoma Christian University
M.S.E., Oklahoma Christian University

## OC AT A GLANCE

Oklahoma Christian University is a higher learning community that transforms lives for Christian faith, scholarship, and service. OC is a comprehensive institution of serious academic inquiry grounded deeply in the liberal arts and the Christian faith, while also providing excellent professional, pre-professional, and graduate programs. It is affiliated with the churches of Christ, but students of all faiths are welcome. The full-time faculty and a majority of students are members of the churches of Christ. The university enrolls almost 2,300 students.

## DEGREE PROGRAMS

Oklahoma Christian University offers degree programs in:

## ART \& DESIGN

Art, Communication Design, Gaming and Animation, Interior Architecture, Visual Art

## BIBLICAL STUDIES

Bible, Bible and Ministry, Children's Ministry, Missions, Preaching Ministry, Youth Ministry

## BIOLOGY

Biology, Biological Education, Cellular and Molecular Biology, Medical Laboratory Science, Nutrition and Exercise Science

## BUSINESS

Accounting, Finance, General Business, International Business, Management, Marketing Management, Sports Management, Sport Wellness \& Recreation

## CHEMISTRY

Biochemistry, Chemistry, Forensic Science, Physical Science Education

## COMMUNICATION

Communication Studies, Creative Media, Electronic Media, Interactive Media,
Journalism, Mass Communication, Media Management, Public Communication and Leadership, Public Relations

## COMPUTER ENGINEERING

## COMPUTER SCIENCE

Artificial Intelligence, Computer Science, Computer Science with Business, Computer Science with Gaming and Animation, Data Science, Software Engineering

## EDUCATION

Early Childhood, Elementary, Secondary

## ELECTRICAL ENGINEERING

HISTORY \& POLITICAL SCIENCE
History, History/Pre-Law, Political Science, Social Studies Education
INTERDISCIPLINARY STUDIES
Interdisciplinary Studies, Performing Arts Management
LANGUAGE \& LITERATURE
English, English Education, English/Pre-Law, English/Teaching English as a Foreign Language, Spanish

MATHEMATICS
Mathematics, Mathematics/Computer Science, Mathematics Education
MECHANICAL ENGINEERING
MUSIC
Instrumental Music, Music Education, Vocal Music
NURSING

## PSYCHOLOGY \& FAMILY SCIENCE

Family Science, Family Science/Human Development, Psychology

The university also offers seven graduate degrees: Master of Accountancy; Master of Arts in Christian Ministry; Master of Business Administration; Master of Divinity; Master of Science in Computer Science, Master of Science in Engineering; Master of Theological Studies. For information on OC's graduate programs, please visit www.oc.edu/grad.

## ACCREDITATION

Oklahoma Christian is accredited by the Higher Learning Commission.
230 South LaSalle Street, STE. 7-500
Chicago, Illinois 60604-1413
Phone: 800.621 .7440 | 312.263 .0456 | Fax: 312.263.7462
www.hlcommission.org | info@hlcommission.org

## ADDITIONAL ACCREDITATIONS

The undergraduate and graduate business programs are accredited by the Accreditation Council for Business Schools and Programs (ACBSP). 11520 West 119th Street
Overland Park, KS 66213
Phone: 913.339 .9356 | Fax: 913.339 .6226
www.acbsp.org | info@acbsp.org
The university is approved by the Oklahoma State Department of Education to recommend students for teacher certification. The Professional Education Unit at Oklahoma Christian University is accredited by the National Council for Accreditation of Teacher Education (NCATE), www.ncate.org. This accreditation covers initial teacher preparation programs. However, the accreditation does not include individual education courses that the institution offers to P-12 educators for professional development, relic ensure, or other purposes.
1140 19th ST. STE. 400
Washington, DC 20036
Phone: 202.223.0077 | Fax: 202.296.6620
www.ncate.org | caep@caepnet.org
The undergraduate computer, electrical, and mechanical engineering degree programs are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The interior architecture program leading to the BFA degree is accredited by the Council for Interior Design Accreditation (CIDA).
206 Grandville Ave, STE. 350
Grand Rapids, MI 49503
Phone: 616.458.0400 | Fax: 616.458.0460
www.accreditit-id.org | info@accreditit-id.org
The music programs are accredited by the National Association of Schools of Music (NASM).
11250 Roger Bacon Drive, STE. 21
Reston, VA 20190
Phone: 703.437.0700 | Fax: 703.437.6312
www.nasm.arts-accredit.org | info@arts-accredit.org
The BSN degree at OC is accredited by the Commission of Collegiate Nursing
Education (CCNE).
655 K. St. NW
Washington, DC 20001
Phone: 202.887.6791
www.aacn.nche.edu/ccne-accreditation | info@aacn.nche.edu.
The Medical Laboratory Sciences program is accredited by the National
Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
5600 N. River Rd, Suite 720
Rosemont, IL 60018-5119
Phone: 773.714.8880
https://www.naacls.org/ | info@naacls.org.

## CERTIFICATIONS

The baccalaureate degree program in Human Science/Family Science is certified as a Family Life Education (FLE) program by the National Council on Family Relations. Students who graduate with the degree can apply for their provisional FLE certification.

## EQUAL OPPORTUNITY STATEMENT

In compliance with Title VI and Title VII of the Civil Rights Act of 1964, Executive Order 246 as amended, Title IX of The Education Amendments of 1972, Sections 503 and 504 of The Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, the Family and Medical Leave Act of 1993, the Civil Rights Act of 1999, and other Federal Laws and Regulations, Oklahoma Christian University does not discriminate on the basis of race, color, national origin, sex, age, handicap, disability, or status as a veteran in any of its policies, practices, or procedures; this includes but is not limited to admissions, employment, financial aid, and educational services. The designated coordinator is Ms. Tamie Willis, Library Director, at (405) 425-5312, 2501 E. Memorial Road, Edmond, Oklahoma 73013.

## CASCADE COLLEGE

In August 1994, OC opened Cascade College in Portland, Oregon. Cascade College was closed in May 2009. Oklahoma Christian University became the official repository for Cascade College, Columbia Christian College, Baker College, and Magic Valley Christian College. Academic records for these colleges may be acquired by contacting the Registrar's Office at Oklahoma Christian University.

This catalog contains official announcements of courses for the 2018-2019 academic year. Oklahoma Christian reserves the right to repeal, change, or amend the rules, regulations, and provisions contained in this catalog and may withdraw or modify the programs and courses described.

## PURPOSE/MISSION STATEMENT

Oklahoma Christian University is a higher learning community that transforms lives for Christian faith, scholarship, and service.

## VISION STATEMENT

OC is home. OC grows. OC is mission.

## THE OC COVENANT

Oklahoma Christian University is a higher learning community that transforms lives for Christian faith, scholarship, and service.

The values and behavior of this Christian community are derived from the Bible, rather than the prevailing culture. Because we are a higher learning community dedicated to a distinctively Christian mission, we join together in a community covenant. This covenant is not a creed demanding strict belief in its veracity and inerrancy, and it is not merely an ideal to which we aspire; rather, it is a personal commitment that while we are members of this community, we will abide by the principles and ideals set forth in the covenant. The purpose of our covenant is to unite all of us at Oklahoma Christian University - students, staff, faculty, administration, and Board of Trustees - in a Christian community that is based on biblical principles and that transforms lives for Christian faith, scholarship, and service.

We recognize that the university is not the church; however, we are a Christian community that seeks to be guided by the teachings of our Lord Jesus Christ as revealed in scripture. We welcome all students, regardless of their church affiliation, who agree to abide by this covenant. Because the university was
founded by members of the churches of Christ and because we seek to serve our church constituents effectively, we expect all full-time faculty and staff to be faithful, active members of the churches of Christ who fully embrace the principles of this covenant.

## OUR FOUNDATION

God interacts with this world as both Creator and Savior (Genesis 1; Hebrews 1:1-3).
The Bible is God's inspired word, which shows us the nature of God, the risen Son, and the Holy Spirit (2 Timothy 3:16; 2 Peter 1:19-21).

We seek to honor God by imitating the nature of God and His son, our Lord Jesus Christ, through the guidance of the Holy Spirit (John 13:13-17; 1 Corinthians 11:1; 1 Peter 2:21).

As members of this Christian higher learning community, we are guided by specific principles set forth in the Bible (Psalms 119:105; 2 Timothy 3:16-17).

OUR CALL
God calls us to do our best in everything we do (Colossians 3:17; Colossians 3:2).
God calls us to submit our will to His (John 15:14; James 4:7; 1 John 2:17).
God calls us to submit to one another in love (1 Corinthians 10:23-24; Galatians 5:1314; Ephesians 5:21; Philippians 2:3-4) and to show His love through the justice, mercy, and faithfulness of our lives (Matthew 5; Mathew 23).

God calls us to live lives of holiness (Ephesians 1:4; 1 Thessalonians. 4:7; Hebrews 12:14; 1 Peter 1:15-16).

## OUR COMMUNITY LIFE

We strive to honor the Lord and be Christ like in all of our conduct (Colossians 3:12-14; Titus 2:11-14).

We strive to demonstrate love and respect for everyone, even those who have views that differ from ours, and avoid conduct or language that is demeaning to others (Galatians 3:28; Philippians 2:3-4; James 2:1-13).

We strive to exercise our Christian freedom responsibly within the framework of God's word, humbly submitting to others (1 Corinthians 10:23-24; 31-33).

We strive to use wise stewardship of our mind, body, time, abilities, and resources and make thoughtful, biblically guided choices in matters of behavior, entertainment, and interpersonal relationships (Philippians 4:8).

We strive to practice honesty and integrity in everything we say and do (Colossians 3:9-10; Revelation 21:8).

We strive to treat our bodies with the honor due the temple of the Holy Spirit honoring God's plan that sexual relations be a part of a marriage between a man and a woman, dressing modestly, and avoiding any self-destructive practices (1 Corinthians 6:19-20).

For the sake of our personal influence and our life together in Christian community, we also agree to certain community standards of conduct which are not specifically set forth in the Bible, but which enable the community to operate peaceably and in harmony with these principles and with one another. These community standards are set forth in the Student Handbook and policy manual.

By choosing to be a part of the Oklahoma Christian community, every member of the student body, staff, faculty, and Board of Trustees affirms his or her understanding of, respect for, and commitment to abide by the principles and standards of conduct set forth in this covenant.

## CONVERGE

## AS A CHRISTIAN COMMUNITY OF LEARNING, WE SEEK THE FOLLOWING UNIVERSITY OUTCOMES:

## ACTIVE FAITH

A graduate of Oklahoma Christian University is able to:

1. Understand the living implications of Christian discipleship and
2. Demonstrate a mastery of scriptures and doctrine sufficient to support a life of service to the Christian community and the wider society.

## FOUNDATIONAL KNOWLEDGE

A graduate of Oklahoma Christian University is able to command a diverse knowledge base and effectively apply it as an educated Christian.

## INFORMATION LITERACY

A graduate of Oklahoma Christian University is able to:

1. Recognize when information is needed and
2. Locate, evaluate, and use the needed information effectively and ethically.

## STRUCTURED REASONING

A graduate of Oklahoma Christian University is able to use the appropriate quantitative and qualitative methodologies to process and organize information into useful forms and models.

## CRITICAL AND CREATIVE THINKING

A graduate of Oklahoma Christian University is able to reach, accept, or create appropriate conclusions and works after a comprehensive exploration of options, issues, ideas, artifacts, and events.

## EFFECTIVE COMMUNICATION

A graduate of Oklahoma Christian University is able to use an understanding of how meanings are constructed between people to form relationships and communicate information effectively via oral, written, and interpersonal means.

## PERSONAL, SOCIAL, AND GLOBAL STEWARDSHIP

A graduate of Oklahoma Christian University is able to:

1. Demonstrate awareness of the impact the graduate, other individuals, and societies can have on their world and
2. Express that awareness with compassion and respect for self and others of similar and different world views and cultures.

These seven university outcomes inform what is done in the Oklahoma Christian University community life, in the majors, and in the core. Concerning the core specifically, the faculty recognizes that these outcomes can be accomplished through a variety of courses and experiences. Accordingly, the faculty has designed a tiered, degree-based core curriculum focused on the liberal arts and based on seven general categories. The core curriculum consists of 55 semester hours in the liberal arts; 43 hours specifically satisfy the seven categories: Bible, communication (written and oral), behavioral/social science, great works, history, mathematics, and science, with 12 additional hours of liberal arts courses which may vary according to your degree.

These requirements were determined by the mission and purpose of the faculty and the faculty's judgment regarding the common needs of all students.

To achieve these objectives, the faculty has established degree-based core curriculum requirements that are listed within the departmental sections of this catalog.

## ETHOS

ETHOS is a Greek word meaning "the distinguishing character or guiding beliefs of a person, group, or institution."

A great spiritual benefit of attending $O C$ is associating with Christian friends, faculty, and staff. Activities like those below contribute to the Christian nature of the campus.

Spiritual life is at the core of the OC experience. With our Ethos program and mobile app for spritual life, students can use their gifts and talents to grow in faith, glorify God, and serve others. You can find more information at http://www. oc.edu/ethos.

## CHAPEL

The campus meets Monday through Friday at 11 am for Chapel in Hardeman Auditorium. There also are periodic departmental Chapels and specialized Chapels focusing on missions, women's issues, spiritual search, and other specific topics. Chapel has been a valued OC tradition from the first days of the university. It provides a time to focus on our Creator, worship together as a community, deepen faith, and seek inspiration.

## DEVOTIONALS

Voluntary devotionals and Bible studies are conducted on campus during the week and there is a university-wide devotional on Monday and Thursday evenings. They provide a time for encouraging one another, learning, and building relationships.

## LOCAL CONGREGATIONS

Congregations throughout the Oklahoma City area will welcome you to work and worship with them. Several nearby congregations have special teaching, fellowship, and work programs especially for OC students. Many congregations also have "adoption" programs that connect students with local families.

## MISSIONS

Many students participate in mission efforts. Groups organize early in the academic year to learn the language and customs of the country to be visited and to prepare for teaching others.

Groups have gone to Ghana, Malawi, Rwanda, Swaziland, Tanzania, Uganda, Asia, Malaysia, Thailand, Austria, Croatia, Germany, Ireland, Spain, Ukraine, Oceania, American Somoa, Australia, New Zealand, Vanuatu, Brazil, Guatemala, Haiti, Honduras, Nicaragua, Panama, Peru, North America, Canada, as well as parts of the United States.


TINIUS EAST

| Shared room | $\$ 4,760$ | $\$ 2,380$ |
| :--- | ---: | :---: |
| Private room with semi-private bath | $\$ 6,560$ | $\$ 3,280$ |
|  |  |  |
| FAILS, WARLICK | $\$ 4,470$ | $\$ 2,235$ |
| Shared room | $\$ 5,120$ | $\$ 2,560$ |
| Shared room with semi-private bath | $\$ 6,160$ | $\$ 3,080$ |
| Private room | $\$ 6,560$ | $\$ 3,280$ |
| Private room with semi-private bath |  |  |
| UNIVERSITY HOUSE NORTH \& SOUTH | $\$ 5,310$ | $\$ 2,655$ |
| Shared room with semi-private suite | $\$ 6,960$ | $\$ 3,480$ |

Note: All undergraduate students, excluding married students, living in OC housing are required to select a meal plan.

MEAL PLAN OPTIONS - RESIDENCE HALLS

| 12 meals per week + 400 Eagle bucks | $\$ 4,200$ | $\$ 2,100$ |
| :--- | :--- | :--- |
| 12 meals per week + 250 Eagle bucks | $\$ 3,900$ | $\$ 1,950$ |
| 14 meals per week + 100 Eagle bucks | $\$ 3,880$ | $\$ 1,940$ |
| 18 meals per week + 50 Eagle bucks | $\$ 3,720$ | $\$ 1,860$ |
| 21 meals per week | $\$ 3,840$ | $\$ 1,920$ |
|  |  |  |
| UNIVERSITY VILLAGE APARTMENTS | ANNUAL | SEMESTER |
| PHASES 3-4 | $\$ 4,600$ | $\$ 2,300$ |
| One bedroom, shared (2 people) | $\$ 4,270$ | $\$ 2,135$ |
| Two bedrooms, shared (2 people per room) |  |  |
|  | $\$ 6,160$ | $\$ 3,080$ |
| MCNALLY HousE - PHASE 5 | $\$ 6,960$ | $\$ 3,480$ |
| Shared (2 people per room) |  |  |
| Private | $\$ 6,810$ | $\$ 3,405$ |
|  |  |  |
| PHASE 6 | $\$ 6,960$ | $\$ 3,480$ |
| One bedroom, shared (2 people) | $\$ 6,160$ | $\$ 3,080$ |

Note: All undergraduate students, excluding married students, living in OC
housing are required to select a meal plan.
MEAL PLAN OPTIONS - APARTMENTS (UNIVERSITY VILLAGE ONLY)

| 75 meals/semester + 100 Eagle Bucks | $\$ 1,650$ | $\$ 825$ |
| :--- | :---: | :---: |
| 75 meals/semester + 200 Eagle Bucks | $\$ 1,830$ | $\$ 915$ |
| 75 meals/semester + 400 Eagle Bucks | $\$ 2,210$ | $\$ 1,105$ |
| 105 meals/semester + 100 Eagle Bucks | $\$ 2,100$ | $\$ 1,050$ |
| 105 meals/semester + 200 Eagle Bucks | $\$ 2,280$ | $\$ 1,140$ |
| 105 meals/semester + 400 Eagle Bucks | $\$ 2,660$ | $\$ 1,330$ |
|  |  |  |
| TEALRIDGE APARTMENTS, MARRIED STUDENT HOUSING |  |  |
| One bedroom, one bath | $\$ 1,000$ per month |  |
| Two bedrooms, one bath | $\$ 1,085$ per month |  |
| Two bedrooms, two bath | $\$ 1,160$ per month |  |

Get more info at www.oc.edu/costs

## FINANCIAL INFORMATION

Because many students need financial help to attend a university, Oklahoma Christian provides a wide variety of financial aid programs. Money for higher education is available from a variety of sources, including federal aid programs, state aid programs, loans, grants, scholarships, and on-campus and off-campus jobs.

The Free Application for Federal Student Aid (FAFSA) determines eligibility for aid. The application form is available online at www.fafsa.gov or from the Student Financial Services Office.

Courses taken during the summer term will be billed based on the rate of summer tuition. Students may not complete coursework during a summer term and apply the credit hours to a fall or spring semester.

## TYPICAL EXPENSES

As is the case in virtually all private institutions, you pay for only part of the total cost of your education. Because OC is a private university that receives no state support, additional funds are donated by individuals and firms interested in the programs that OC offers. Most students who attend OC will incur the following expenses:

| Tuition (12-17 semester hours), per semester | $\$ 11,230$ |
| :--- | :--- |
| Average room cost for freshmen, per semester | $\$ 2,235$ |
| Meal Plan, 210 meals | $\$ 1,860$ |
| Student Activity Fee | $\$ 150$ |
| Total | $\$ 15,475$ |

The tuition charge of $\$ 11,230$ per semester is for 12 to 17 semester hours. Some programs may have course related fees. Fees are separate charges from this tuition. Those enrolling in more than 17 credit hours per semester pay $\$ 660$ for each hour above 17.

## PAYMENT

## ACCOUNT PAYMENT AGREEMENT FORM

Students who pre-enroll will receive a link to an Account Payment Agreement Form along within their electronic award letter. All students are required to complete a payment agreement form at least two weeks before classes begin. Payment of expenses may be arranged under one (or a combination) of four account payment options. Full payment is due two weeks prior to the start of each semester unless other payment arrangements have been made.

## PLAN 1 - CASH AT ENROLLMENT

This is the best form of payment because it eliminates all service charges. Students should be prepared to make payment for tuition, fees, and room/board two weeks prior to each semester. Checks should be made payable to OC. The total cost, excluding financial aid, is approximately $\$ 15,475$. The university also accepts four major credit cards (American Express, Discover, MasterCard, and Visa), which can be used to pay any part of the total student charges. Those who pay with a credit card will be charged a $2.75 \%$ convenience fee.

## PLAN 2 - INSTALLMENT PAYMENT PLAN

This monthly payment plan is available through the student's online account at http://my.oc.edu. There is a contract fee of $\$ 50$. The first payment is due upon enrollment in the payment plan. No finance charges are assessed to the student's account as long as the contract payments are made on time each month. Yearly costs may be paid in 8,9 , or 10 months depending on the enrollment date. For a 10 -month payment plan, the student or parent must enroll before July 25 . Students can access their student account by clicking on "Student Account Online" located on MyOC under QuickLinks. Students may also grant their parent(s) access by assigning a Parent Pin from their Student Account Online.

## PLAN 3 - PARENT LOAN FOR UNDERGRADUATE STUDENTS (PLUS)

This is a fixed interest rate loan and is available to the parents of undergraduate, dependent students enrolled in at least a half-time course of study. The amount available is determined by the cost of education less the amount of other financial aid the student receives. Interest begins accruing when the loan is disbursed and repayment begins 60 days after the loan is fully disbursed. Parents may also defer repayments until their child has graduated or ceased attending at least half-time. The Student Financial Services Office must certify eligibility for the loan. Please contact the Student Financial Services Office or visit www.oc.edu/loans for additional information regarding this loan.

## PLAN 4 - ALTERNATIVE LOANS

Various student loan and student sponsor loans are available to students through private lenders. More information is available through the Student Financial Services Office. For more information, visit www.oc.edu/loans.

For a complete listing of OC's financial policies, please visit www.oc.edu/ financial.

## REFUND POLICY

## WITHDRAW/DROP REFUND POLICY

Tuition and general fee refunds are made to students who officially withdraw from a regular 15 -week course or from the university before the fourth week of a semester. Refunds are given as follows:

- If the withdrawal date is in the first week, a $100 \%$ refund will be made.
- If the withdrawal date is in the second week, a $75 \%$ refund will be made.
- If the withdrawal date is in the third week, a $50 \%$ refund will be made.
- After the third week, no refunds will be made.


## SEVEN AND EIGHT WEEK COURSE WITHDRAW/DROP REFUND POLICY

- If the withdrawal date is within the first week, a $100 \%$ refund will be made.
- If the withdrawal date is within the second week, a $50 \%$ refund will be made.
- After the second week, no refunds will be made.


## SHORT COURSE WITHDRAW/DROP REFUND POLICY

A short course is a course that lasts 6 weeks or fewer.

- If the withdrawal date is on the first day, a $100 \%$ refund will be made.
- If the withdrawal date is on the second day, a $50 \%$ refund will be made.
- After the second day, no refunds will be made.


## FEDERAL FINANCIAL AID PROGRAMS <br> APPLYING FOR AID

Interested students should complete a Free Application for Federal Student Aid (FAFSA) and the admissions application. Determination of the student's eligibility is based on family size, the number in college, income, resources, obligations, and the cost of the university. All information contained in these documents is held in strict confidence. The resulting financial aid report determines eligibility for a Federal Pell Grant, Federal Supplemental Education Opportunity Grant, Federal Work Study, Federal Direct Loan, Oklahoma Tuition Equalization Grant, and Oklahoma Tuition Aid Grant. The FAFSA is available each October for the following academic year.

## GRANT PROGRAMS

Federal Pell Grants are available to students. Eligibility is determined on the basis of need as defined by the Pell Grant Program Division of the U.S. Office of Education. Federal Supplemental Educational Opportunity Grants (SEOG) also are available to students. Pell Grant recipients are to receive priority consideration for SEOG awards.

Oklahoma Tuition Aid Grants and Oklahoma Tuition Equalization Grants also are available to students. Eligibility is determined by the Oklahoma State Regents for Higher Education. Recipients must be legal residents of Oklahoma and complete the FAFSA no later than December 1.

## LOAN PROGRAMS

FEDERAL DIRECT LOANS are available for eligible students at a fixed interest rate. Subsidized and unsubsidized Direct Loans have a fixed interest rate. Students may borrow up to $\$ 5,500$ a year as a freshman, $\$ 6,500$ a year as a sophomore, and $\$ 7,500$ a year as a junior or senior. A loan application must be completed in addition to the FAFSA. Repayment begins six months after the student ceases to be enrolled at least half-time. There are two forms of the Federal Direct Loan. The Federal Subsidized Direct Loan is based on a student's need and the government pays the interest while the student is in school. The Federal Unsubsidized Direct Loan is based on the university's cost of attendance. The limit of unsubsidized takes into account the amount of subsidized received. The government does not pay interest on the unsubsidized loan while the student is in school. The student can choose to pay interest quarterly or add it to the loan principal.

## PARENT LOANS

Federal Parent Loans for Undergraduate Students (PLUS Loans) are unsubsidized federal loans for the parent and in the parent's name. It is a credit based loan. A FAFSA for the student must be completed prior to application.

Financial aid received by the student and the cost of attendance will determine eligibility. Families whose students who have little or no eligibility for the other federal aid programs may find the PLUS loan very beneficial. Parents must apply at www.studentloans.gov.

Repayment begins 60 days after the loan is disbursed or parents may also defer repayments until their child has graduated or ceased attending at least half-time. For more information, contact the Student Financial Services Office or visit www. oc.edu/loans.

## FEDERAL WORK PROGRAM

Federal Work-Study (FWS) is an on-campus work program that allows you to earn a portion of your university expenses. Jobs include work in the cafeteria, library, maintenance office, and administrative offices. Generally, you can work an average of 8 hours per week. Pay is at minimum wage. Awarding of FWS only indicates eligibility. You are responsible for finding a job. Job openings are posted online on the university's website at www.oc.edu/campusjobs.

## SCHOLARSHIP AND AID PROGRAMS

OC offers scholarships for students planning to attend the university based on financial need and merit. Information regarding available scholarships can be found at www.oc.edu/scholarships. Application forms are available through the Admissions Office and at www.oc.edu/admissions.

All academic merit scholarships for first-time freshmen are based on a combination of the student's highest composite ACT or SAT score along with the student's unweighted high school GPA. Students may receive academic merit scholarships up to 8 semesters. Recipients must maintain a specific cumulative college GPA to receive the award each semester.

National Merit Scholars are coming to Oklahoma Christian in record numbers. To recognize and encourage these students to attend $O C$, the university makes a very generous scholarship available. Applicants may submit a copy of the award letter or National Merit certificate to the Student Financial Services Office to receive more information.

Oklahoma State Regents Scholarships are awarded to outstanding freshmen based on the sum of their ACT subscores (or RSAT score). The minimum score required for the top half-percentile of students depends on different subdivisions of the population, as defined by the State Regents. Students also may qualify with nationally-recognized awards, such as a National Merit Scholar honor. The award is $\$ 4,000$ per year.

ROTC SCHOLARSHIPS are awarded competitively to students desiring to earn an Army or Air Force officer's commission while earning a baccalaureate degree. They are awarded on the basis of academic achievement, ACT score, physical examination, and interview data. The scholarship provides full tuition, books, and laboratory fees. Army scholarship recipients receive military instruction through an agreement with the University of Central Oklahoma. Application forms and more information may be obtained from Army ROTC, University of Central Oklahoma, Edmond, OK 73034; (405) 974-5167.

Employment opportunities are available for students who desire work, but do not qualify for Federal Work-Study programs. On-campus and off-campus job opportunities are posted on the university's website at www.oc.edu/jobs.

## OTHER AID PROGRAMS

## JOHN B. WHITLEYISTUDENT GOVERNMENT ASSOCIATION LOAN FUND

This fund is maintained through the Office of Student Life. Loans up to $\$ 50$ are available to students for a period of one month at a $\$ 0.50$ interest fee per loan. Repayment of loans is set on a 30 -day basis, with a default charge of $\$ 10$. The fund was established by the residents of the OC men's residence halls and Mr. and Mrs. Francis Whitley of Riddleton, Tennessee, in memory of their son, an OC student in the 1960s.

## VETERANS PROGRAMS

Assistance is available to veterans who have served in the U.S. Armed Forces for more than six months of active duty. Students should check with their regional Veterans Administration Office.

Disabled veterans are handled through a separate program by the VA. To assist disabled veterans in receiving additional benefits, the VA set up a counseling program. Children of veterans may be eligible for some benefits. You should check with the VA office to determine if you qualify as a war orphan or as a child of a veteran.

## BIA GRANTS

The Bureau of Indian Affairs can provide applications for grants. You must contact your tribe to determine eligibility criteria.

## VOCATIONAL REHABILITATION PROGRAMS

Vocational rehabilitation assistance is available to qualified applicants. High school counselors should be contacted for the address of local vocational rehabilitation counselors.

## APPLICATION INFORMATION

For answers to questions or for an application, please write or call:
Office of Admissions
Oklahoma Christian University
P.O. Box 11000

Oklahoma City, OK 73136-1100
(405) 425-5050 or (800) 877-5010
http://www.oc.edu/admissions| admissionsoffice@oc.edu

## GRADUATE STUDIES INFORMATION

For information about the Master of Accountancy, Master of Arts in Christian Ministry, Master of Business Administration, Master of Divinity, Master of Science in Computer Science, Master of Science in Engineering, and Master of Theological Studies, email graduateprograms@oc.edu.

## ACADEMIC POLICIES

## ADMISSION

To be accepted to Oklahoma Christian University, students must complete the following steps:

## FOR HIGH SCHOOL STUDENTS:

1. Submit a completed application for admission and $\$ 25$ non-refundable application fee.
2. Submit a current high school transcript.
3. Submit an ACT or SAT score.

Eligible high school juniors may obtain early admission to OC and attend the summer session before their senior year and/or concurrent courses during their senior year of high school. To be granted full admission to Oklahoma Christian, high school students must submit an official high school transcript that shows evidence of graduation.

## ACT OR SAT EXAMS

The ACT or RSAT is required of all entering freshmen except for international students. You should take the test during the regular testing periods during your junior or senior year in high school since some scholarship offers are based on test scores.

Residual ACT testing is offered on an appointment basis for those who have applied for admission to Oklahoma Christian. Call (405) 425-5050 for an appointment. Residual test scores are mailed directly to the examinee with a copy kept by OC. The testing is given through OC. Residual ACT test scores are not sent to other universities. OC may not administer ACT residual testing on the same day that a national ACT exam is administered. National registration for the ACT exam is made through the national office.

ACT registration packets are normally available at any high school. They also may be ordered by mail by calling (319) 337-1270 or by registering online at http://www.act.org.

## FOR APPLICANTS OVER 18 WHO HAVE NOT GRADUATED FROM HIGH SCHOOL:

1. Submit a completed application for admission and $\$ 25$ non-refundable application fee.
2. Submit evidence of having passed the GED test.
3. Submit an ACT or SAT score.

## FOR TRANSFER STUDENTS FROM OTHER COLLEGES OR UNIVERSITIES:

Submit a completed application for admission and $\$ 25$ non-refundable application fee.

Submit an official high school transcript (waived for students who have completed 24 or more semester hours of accredited college credit).

Submit official academic transcripts from all colleges and universities previously attended.

Transfer students must be eligible to re-enter schools previously attended. Transfer credits will be accepted from regionally-accredited colleges and universities upon approval of the Registrar. A maximum of 65 semester hours from community colleges may be applied toward degree requirements.

## FOR TRANSFER STUDENTS FROM PREACHER TRAINING SCHOOLS:

Submit a completed application for admission and $\$ 25$ non-refundable application fee.

Submit an official high school transcript (waived for students who have completed 24 or more semester hours of accredited college credit).

Submit a complete official transcript from the preacher training school attended.
Submit official academic transcripts from any other colleges and universities previously attended.

## FOR INTERNATIONAL STUDENTS:

Complete the application for admission online at www.oc.edu/apply. A $\$ 25$ non-refundable application fee will be required before submitting the online application. This school is authorized under Federal Law to enroll nonimmigrant students. Undergraduate international students must submit no less than $\$ 3500$ as an enrollment deposit before enrolling in classes or securing a housing reservation. The deposit is fully refundable and will go towards the student's tuition for the first semester. Enrollment deposits may be paid online at https:// www.peertransfer.com/school/oc.

Students must indicate the payment option for which they will pay the remaining portion of their enrollment cost by submitting a Payment Plan Form no later than two weeks before the first day of classes. Payment options include: an Installment Payment Plan (IPP), a loan from the student's home country, or making a cash payment equal to the amount of the remaining balance.

## PROOF OF ENGLISH PROFICIENCY

Applicants who have not studied in a country where English is the PRIMARY lanaguge of instruction must take the Test of English as a Foreign Language (TOEFL) or International English Language Testing Service (IELTS) and arrange for the testing agency to send the test results to Oklahoma Christian University. The required TOEFL score is 500 PBT ( 61 IBT) and IELTS is 6.0 . ESL students scoring below 500 may enroll in the University's ESL courses. A TOEFL or IELTS score is required for enrollment in the fall or spring ESL classes. Students scoring between 460-499 after successfully completing at least a semseter of University ESL courses may apply for provisional admittance to the University.

## B.A. DEGREE LANGUAGE REQUIREMENT

International students must successfully complete the Communication 9 hour
sequence at OC with a grade of "C" or above in each course to meet the language requirment for the B.A. degree. They must also provide proof of primary language other than English. See the Office of the Registrar to complete this requirement.

## ACADEMIC DOCUMENTATION

Original or officially certified copies of all grade reports for all secondary and higher education studies, as well as original or officially certified copies of all academic diplomas, certificates, and national or other major examination results must be submitted, along with an official English translation certified by the educational institution.

## FINANCIAL DOCUMENTATION

An applicant must provide proof of adequate funds, $\$ 33,290$ per year, to live and study full-time at Oklahoma Christian University. Applicants must submit a completed Financial Worksheet accompanied by an original bank verification letter or statement. The U.S. government requires this certification before OC can issue the appropriate U.S. government forms necessary for obtaining a visa at a U.S. embassy or consulate.

## STATEMENT OF UNDERSTANDING

An applicant must submit Oklahoma Christian University's Statement of Understanding outlining rules and expectations of the University. Once the above documents have been received and approved, a Certificate of Eligibility for Non Immigrant (F-1) Student Status Form I-20 can be issued for those students requiring a student visa.

## TRANSFER STUDENTS

A Transfer Release Form is required for students transferring from another U.S. college or university. It must be signed by the applicant and completed by the current institution which holds the student's current I-20 record. Please note that students must hold legal status in the United States to be eligible for admission.

## ADMISSION TO OC

Upon admission, first-time students and transfer students an I-20, and F-1 visa instructions from the International Admissions Records Office at OC.

OC provides a wide range of support and services for international students. Assistance is provided in university enrollment, visa compliance, cross-cultural adjustment, and tutoring. You are invited to join the International-American Association, the campus association promoting cross-cultural friendships and awareness.

## CLASSIFICATION OF STUDENTS

## FRESHMEN

Students with fewer than 30 semester hours credit.

## SOPHOMORES

Students with 30 to 59 semester hours credit.

## JUNIORS

Students with 60 to 89 semester hours credit.

## SENIORS

Students with 90 or more semester hours credit.

## TRANSFERS

Students who have completed 16 or more college level hours since graduating from high school and before attending OC.

## FULL-TIME

Students taking 12 semester hours or more during any semester.

## GRADUATE

A student in a dual undergraduate/graduate degree program is considered a graduate student when he/she has completed 8 full time ( 12 hour) semesters, including full time summer semesters, of undergraduate studies. These full-time semesters may be completed at OC or another insitutiton. The change to graduate student status will impact a student's use of scholarships, financial aid,
and tuition rates

## SPECIAL

Students taking fewer than 12 semester hours during any semester.

## AUDIT

An audit student is one who has obtained official permission to attend a course without taking it for university credit. A reduced tuition fee is charged for students who audit a course.

## UNCLASSIFIED

An unclassified student is one who has applied for admission, but who has not yet been officially admitted because sufficient information has not been received. If the necessary information is not submitted within 30 days, you will be asked to withdraw.

## LEAVE OF ABSENCE

VA students who must leave OC to complete service requirements or because they are called to active duty may request a leave of absence for fall, spring, and/or summer semesters. A Leave of Absence Request Form must be completed and submitted to the Registrar as soon as the student learns that a leave of absence is necessary. If, at the end of the leave of absence period, the student does not return, the student's participation in the program will be terminated. Application for readmission will be required if the student wishes to return.

## ACADEMIC STATUS

GOOD STANDING
To be considered in good standing, you must maintain the cumulative GPA shown below:

| Freshman | 1.70 | (D) |
| :--- | :--- | :--- |
| Sophomore | 2.00 | (C) |
| Junior | 2.00 | (C) |
| Senior | 2.00 | (C) |

All students will have an academic status check at the end of each semester. Those who are not in good standing will be notified of their status.

## ACADEMIC ALERT

If your GPA for any semester, or if your cumulative GPA, falls below the level of good standing, you will be notified and placed on academic alert. Also, students with 64 or more hours and an undeclared major will be placed on academic alert.

## ACADEMIC PROBATION

If your GPA for the semester and your cumulative GPA fall below the level of good standing, you will be placed on academic probation. After two semesters of academic probation, you may not be allowed to continue at the university without permission from the Academic Appeals Committee. Students on academic probation are ineligible for intercollegiate athletic competition or for performance in other university-sponsored activities.

## ACADEMIC SUSPENSION

When you have completed two semesters on academic probation without achieving the level of good standing, you may be suspended. Appeals of suspension should be addressed in writing to the Registrar, who will present the case to an academic suspension appeals committee.

A suspended student may be re-admitted once, and the re-admitted student must attain a 2.0 GPA each semester while on probation. You will be removed from probation only when a cumulative GPA of 2.0 has been reached.

The university may suspend or dismiss any student who fails to earn a GPA of at least 1.0 during a semester, regardless of classification or number of hours completed.

## FINAL EXAMS

Generally, students may not reschedule final exams due to heavy testing in a single day. A student may request that his or her final examination in a class be rescheduled only where the student has more than three examinations scheduled for a single day. If a student wishes to reschedule a final exam, he or she must receive permission from the Dean. Final examinations will not be given early unless approved by the Deans' Council upon a showing of extraordinary circumstances. Examples of extraordinary circumstances are non-elective surgery or being called to active duty.

## PROCTORED EXAMS

For all faculty who use or may use proctored exams in their courses regardless of delivery mode (face-to-face, online, or hybrid), the Federal Government and HLC requires that students be notified of the potential cost they may incur if the exam is proctored. If a course in an exam must be proctored, you must have your proctor identified and all proper forms turned in by the second week of class

## CHOOSING A PROCTOR

Some proctoring services may require a testing fee. Any testing fees will be the responsibility of the student. Proctoring options could include:

- Testing facility at a University or Community College campus (e.g., UCO Testing Center)
- Sylvan Learning Center (or equivalent)
- Federal Government Agency
- ProctorU (at home proctoring service)
$\$ 22.50$ per each two-hour exam (price subject to change).


## HOW PROCTORU WORKS AND PROCTORU TECHNICAL REQUIREMENTS

Please note: ProctorU can only be used for electronic exams. Please reference your course syllabus to see how your exams are administered.

## WHO CANNOT BE A PROCTOR

- Relative or spouse
- Co-worker, business associate or supervisor
- Friend or peer
- Coach
- Another Oklahoma Christian University student


## EXAM PROCTORING EXPECTATIONS

- Proctors who do not fit the list of appropriate proctors will be refused.
- Proctors may expect payment for this service. Any costs involved are the student's responsibility.
Discuss the number of exams and length of each with your proctor, as it requires a time commitment.
- Verify your proctor will be available for all of your exams. Your proctor must agree to return exams in a timely manner.


## AFTER FINDING YOUR PROCTOR

- Have your proctor complete the Examination Proctor Agreement form.
- Submit your proctor form by the end of the second week of class.
- Confirmation will be sent to you and your proctor upon approval.


## GRADING SYSTEM

Most courses use the standard letter grades: $A, B, C, D$, and $F$.
A: Superior performance in which the student demonstrates:

1. A thorough knowledge and retention of the factual material of the subject.
2. A thorough understanding of the principles of the material studied.
3. A timely and accurate completion of the course requirements such as homework, term papers, etc.
4. An ability to apply and correlate the subject material to the solution of new and different problems.

B: Good performance in which the student demonstrates:

1. An above average knowledge and retention of the factual material of the subject.
2. An adequate understanding of the principles of the material studied.
3. A timely and accurate completion of the course requirements.
4. Some ability to apply and correlate the subject material to the solution of new and different problems.

C: Adequate performance in which the student demonstrates:

1. An average knowledge and retention of the factual material of the subject.
2. Some understanding of the principles of the material studied.
3. Satisfactory completion of the course requirements.

D: Poor performance in which the student demonstrates:

1. Limited knowledge and retention of the factual material of the subject.
2. Limited or no understanding of the principles of the material studied.
3. Unsatisfactory completion of the course requirements.

F: Failing performance in which the student demonstrates:

1. Little or no knowledge and retention of the factual material of the subject.
2. Little or no understanding of the principles of the materials studied, and/or
3. A failure to satisfactorily complete the course requirements.

Other grades which may be awarded are as follows:
NP: A no-passing grade in a course that does not give a letter grade.
$P$ : A passing grade in a course that does not give a letter grade.
$P^{*}$ : A passing grade in awarded for AP, CLEP, IB, credit by exam, or prior learning credit.

W: Withdrawn from a course after the fourth week and before the 12th week of a regular 15 week course.

I: Granted if you have not met the requirements of the course due to illness, an emergency, or some other cause deemed reasonable by the instructor. A grade of "l" is not given when you have simply been negligent of class requirements. A grade of "l" is removed by the completion of the necessary work within six weeks after the semester ends. The professor has an option to grant an extension if warranted based on a request by you within the first six weeks. If a grade has not been submitted by the professor at the end of 12 weeks, the Registrar will convert the grade from an "l" to an " $F$ ".

The specific course requirements such as term papers, homework, attendance, special projects, and the number and scope of examinations are at the discretion of each professor. You should consult the course syllabus for the specific requirements and grading scale for each class.

If you repeat a course at OC, the higher grade only is used to compute the GPA. The original grade will remain on the transcript.

## ACADEMIC HONORS

The Honor Roll recognizes students with a 3.40 (B) or above semester GPA.
The Deans' List honors those with a 3.85 (A) or above semester GPA.
The President's List honors those with 4.00 (A) grades semester GPA.

## GRADUATE WITH HONORS

Students graduate with honors at these levels:
Cum laude $\quad 3.40$
Magna cum laude 3.60
Summa cum laude 3.85
Honors Fellow 3.40 , with completion of honors core curriculum

## POLICY ON ACADEMIC HONESTY

## CHEATING

Cheating on an examination, assignments, roll sheet, or any other course related work or activities undermines the ethics of the academy and the specific Christian purposes of Oklahoma Christiain University. Accordingly, students who
cheat on examinations, assignments, or other course related work or activities will face serious consequences, as outlined in this policy.

## PLAGIARISM

One particular form of cheating is plagiarism. Plagiarism is transmitting of another's ideas, words, or materials as one's own and/or the failure to credit accurately the ideas, words, or materials of another. Plagiarism also includes passing off the work of another (a friend, a parent, a website) as one's own. Plagiarism undermines the ethics of the academy and the specific Christian purposes of OC. Accordingly, students who engage in plagiarism in assignments submitted will face serious consequences, as outlined in the following policy.

## PENALTIES FOR ACADEMIC DISHONESTY

On the first offense, the student will receive a " 0 " (zero) credit for the examination or assignment. For forms of cheating or dishonesty other than on examinations or assignments, the professor shall have the discretion to impose an appropriate penalty. Professors must send documentation of the first offense to the appropriate chair, the dean of the appropriate college, the Chief Academic Officer, and the Dean of Students.

On the second offense in the same course, the student will receive an " $F$ " in the course. Professors must send documentation of the second offense to the appropriate chair, the dean of the appropriate college, the Chief Academic Officer, and the Dean of Students.

At either the first or second offense, the student may appeal using the process set forth for grade appeals.

If a student commits offenses in two or more courses, the Academic Appeals Committee may assign penalties for academic dishonesty in addition to the penalties assigned by the professors in the courses. The Committee may assign penalties up to and including suspension from the University in instances where a student has engaged in cheating or plagiarism in two or more courses. The academic appeals committee will inform the Chief Academic Officer and the Dean of Students in writing of any penalties imposed by it and will report annually on its activities to the university's academic appeals committee.

Professors should maintain the highest standards of academic honesty both in and out of the classroom. Professors must apply the rules regarding cheating and plagiarism and report to the appropriate channel. The student should be referred to the OC Covenant for principles that should guide conduct in such matters.

## STUDENT COMPLAINT SYSTEM AT OKLAHOMA CHRISTIAN UNIVERSITY

To improve the ease and accessibility of reporting student complaints, Oklahoma Christian University developed an online student complaint system that was deployed in the Fall 2016 semester. The new student complaint system, accessible through the campus intranet, provides a single online portal for all types of student complaints. Students select one of four complaint categories (Title IX, Academic Appeals, Student Life, and Campus Police), and then complete the online form related to that category. Once completed and submitted, the form is automatically routed to the appropriate university employee (e.g., the Title IX coordinator, FERPA officer, Dean of Students, or Campus Police department), who has a specified period of time to respond. Upon clicking the "submit" button, students receive an automated email confirming the submission and providing information about the expected response time. The responsible employee also receives an email notifying him or her of the complaint and reminder emails if the complaint is not resolved within the specified timeframe. All responses to the complaint and the complaint resolution are documented in the system, which provides a log of all complaints submitted as well as information about the response time for various areas.

## GRADE APPEALS

Any student may appeal a final grade received in a course. To assure due process and protect the rights of both the student and the professor, the appeals
procedure below must be followed. Except by this process, no student-appealed grade may be changed, and no student-contested academic action by a professor may be reversed.

## STEP 1 - CONTACT THE PROFESSOR

A student who disagrees with a professor on a course grade or other graderelated issue must contact the professor in writing to explain the concern or complaint. If the student does not bring the matter to the professor's attention within four weeks of the final grade report, the student loses the right of appeal. The professor has two weeks to respond in writing to the student's appeal.

## STEP 2 - APPEAL TO THE CHAIR OR ASSOCIATE DEAN

If the interaction with the professor does not resolve the issue, the student has two weeks from that response to submit an appeal through the online Student Complaints system (available through MyOC) to the chair or associate dean of the professor's school or department. Otherwise the student loses the right of appeal and the issue is considered closed. If the professor is the chair or associate dean, the student will take the appeal to the dean.

1. The appeal must include a written description of the circumstances as understood by the student. The chair or associate dean will request any supporting documentation from the professor. The chair or associate dean will discuss the complaint with the professor and, where appropriate, with other students. The chair or associate dean will make a decision as soon as is reasonably practicable, but in no event longer than four weeks from the date of receipt of the appeal, and will communicate that decision in writing to the student.
2. After receiving the appeal, the chair or associate dean has two options: the chair or associate dean may make the decision and explain it to the student and the professor within two weeks or, if the chair or assoicate dean considers the matter sufficiently serious or complex, the chair or associate dean may take the matter to the dean of the professor's college for further review and response.

## STEP 3 - APPEAL TO THE DEAN

If the chair or associate dean makes the decision, and if the student or professor is not satisfied that the chair's decision is fair and just, either may appeal to the dean of the professor's college by submitting information through the online Student Complaints system within one week of the decision by the chair.

Upon receiving notice of the appeal, the dean will request from the chair any documents submitted by the professor that are not available through the Student Complaints system and the chair's rationale for the decision. The dean will discuss the matter with all those involved.

After receiving the appeal, the dean has two options: the dean may make the decision and present it in writing to the student, the professor, and the chair within four weeks or, if the dean considers the matter sufficiently serious or complex, the dean may take the matter to the Academic Appeals Committee.

## STEP 4 - APPEAL TO THE ACADEMIC APPEALS COMMITTEE

If the dean makes the decision, and if the student or professor is not satisfied that the dean's decision is fair and just, either may initiate an appeal to the Academic Appeals Committee by submitting information through the Student Complaints system within one week of the dean's decision. The dean will present any documents submitted by the professor or gathered in evidence prior to the dean's decision that are not available through the Student Complaints system.

The Academic Appeals Committee will discuss the matter with the student and professor individually. The Academic Appeals Committee will decide the matter as soon as is reasonably practicable, but in no event longer than four weeks after the matter is submitted to it. After review, the decision of the Academic Appeals Committee is final and must be reported in writing within a week of the decision to all involved parties and to the Chief Academic Officer.

The time periods noted above may, in each instance, be extended due to
extenuating circumstances or when the time period runs during school holiday periods, such as Christmas or summer break.

All academic appeals processes in programs or departments need to be clear that program-level appeals precede the institutional Academic Appeals Committee in order to be in compliance with the Department of Education and HLC standards, as well as appropriate legal practices. The Academic Appeals Committee appeal decisions supersede the program decisions.

## FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

The Family Educational Rights and Privacy Act (FERPA) affords you certain rights with respect to your education records:

The right to inspect and review your education records.
The right to request the amendment of your education records to ensure that they are not inaccurate, misleading, or otherwise in violation of your privacy or other rights.

The right to consent to disclosures of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent.

The right to file with the U.S. Department of Education a complaint concerning alleged failures by the university to comply with the requirements of FERPA.

The right to obtain a copy of the university's student records policy. You may obtain a copy of the policy from the Office of the Registrar in CogswellAlexander Hall. You will be notified annually of these rights in the Catalog and the Student Handbook.

Students may contact OC about FERPA-related complaints by using the Student Complaints form available through MyOC (to file a FERPA-related complaint, access the form, then click on Student Life and select Miscellaneous). All complaints related to FERPA will be directed to the university's Registrar and FERPA officer, Dr. Stephanie Baird.

## CLASS SCHEDULING

The university makes every reasonable effort to offer all classes for which registration has occurred. There are times, however, when insufficient enrollment in the class makes it necessary for the university to cancel the section. There are times when you may attempt to register for a class that has already filled. Once a class is filled, students may place themselves on the waiting list for that particular section. Being on a waitlist does NOT guarantee registration in the class. Your position on a class waitlist is on a first-come, first-served basis. Registration from a waitlist is not automatic. Check your OC email daily; if you receive a notification, you will have to login to myOC and register within 24 hours or lose your position on the waitlist. For more information, visit www.oc.edu/registrar/waitlist. Please keep these situations in mind as you schedule classes needed to complete your degree.

## DROP AND ADD PROCEDURES

## DROPPING A CLASS

To drop a class, you must do the following:

- Get your advisor's signature on a change in enrollment form.
- Get your professor's signature, unless the drop is made before the last day to add classes.
- Student-athletes must also obtain the signature of either the Assistant AD for Compliance or the Director of Academic Excellence in Athletics.
- Veterans should get a signature from the Veteran Certifying Official
- International Students should get a signature from the Sevis Coordinator.
- Take the drop/add slip to the Office of the Registrar.

Note: Freshmen and sophomores must enroll in a Bible course each semester. These classes may not be dropped.

## SEMESTER DROP SCHEDULE

Weeks 1-4 No record of dropped course
Weeks 5-12 "W" recorded for dropped course
After Week 12 No dropping of course

You may withdraw from a course(s) through week 12 of the semester with a grade of " W " recorded on the transcript. Drop and add deadlines are published in the official class schedule for each semester and in the catalog calendar.

DROP/ADD DATES FOR SPECIFIC TYPE OF CLASS STRUCTURE
Based on 15 hours of "seat time" per credit hour offered

REGULAR 15-WEEK TERM:
Cannot add after the 1st week of class
Can drop without a grade of "W" week 1-4
Can drop with a grade of "W" week 5-12
Cannot drop after week 12

ONE-WEEK COURSE - MEETS 5 TIMES: EACH CLASS = 3 WEEKS
Cannot add after the 1st class meets
Can drop without a grade of "W" day 1
Can drop with a grade of "W" day 2-4
Cannot drop after day 4
TWO-WEEK COURSE - MEETS 10 TIMES: EACH CLASS = $1 ½$ WEEKS
Cannot add after 1st class meets
Can drop without a grade of "W" days 1-2
Can drop with a grade of " $W$ " days 3-8
Cannot drop days 9-10
THREE-WEEK COURSE - MEETS 6 TIMES: EACH CLASS $=2 ½$ WEEKS
Cannot add after 1st class meets
Can drop without grade of " $W$ " days 1-2
Can drop with a grade of "W" days 3-4
Cannot drop days 5-6
THREE-WEEK COURSE - MEETS 12 TIMES: EACH CLASS = $111 / 4$ WEEKS
Cannot add after 1st class meets
Can drop without grade of " $W$ " days 1-3
Can drop with a grade of "W" days 4-9
Cannot drop days 10-12
THREE-WEEK COURSE - MEETS 15 TIMES: EACH CLASS = 1 WEEK
Cannot add after 1st class meets
Can drop without a grade of "W" days 1-4
Can drop with a grade of "W" days 5-12
Cannot drop days 13-15

FOUR-WEEK COURSE - MEETS 20 TIMES: EACH CLASS = ¾ WEEK
Cannot add after day 2
Can drop without a grade of "W" days 1-5
Can drop with a grade of " $W$ " days 6-16
Cannot drop days 17-20

SIX-WEEK COURSE - MEETS 30 TIMES: EACH CLASS = 3/4 WEEK
Cannot add after day 2
Can drop without a grade of "W" days 1-5
Can drop with a grade of " $W$ " days 6-16
Cannot drop days 17-20

## ADDING A CLASS

To add a class, you must do the following:

- Get your advisor's signature on a drop/add slip.
- Get the signature in the Registrar Office if the add is made after the deadline for adding classes or if the class will raise your course load above 17 hours.
- Get appropriate signatures (see list on previous page).
- Take the drop/add slip to the Office of the Registrar.


## ADDITIONAL CREDIT PROGRAMS AND TESTING

You may receive credit for certain courses or activities not taken in the traditional manner.

## CREDIT BY INDEPENDENT STUDY

You may receive credit by independent study in your major with the approval of your college's dean. Professors will assign a regular grade in a course on the basis of an examination, contact with you during a period of independent study, oral reports, and/or research papers.

You should take the initiative to propose a study or project to the dean and the faculty member before enrollment. Arrangements for periodic progress checks should be made within two weeks after the semester begins. You normally will not be allowed to take by independent study a course that is regularly offered. To comply with federal regulations, no more than $70 \%$ of an independant study course can be offered online. Students and faculty must document in their plan of study or syllabus how face to face meetings will take place between the instructor and the student. Normally, no more than 12 semester hours in independent study may be applied toward a degree. Faculty who agree to supervise an independent study must post the syllabus for the independent study in the online site for syllabi.

## EXTRACURRICULAR CREDIT

A department may request one hour of credit for an activity in which academic courses are usually given at recognized institutions. Prerequisites may be established if desired.

The course must provide some instruction in the area being served and must require a total of no fewer than 60 hours of student participation. The professor certifies with the grade that you participated the required amount of time. The grade itself indicates the quality of participation. Hours well above the minimum may be given some consideration in establishing the grade. Because some activities will not start until after registration, you may enroll for the course after the stated time and the final grade will be the only one submitted.

## CREDIT BY EXAMINATION POLICIES

## CLEP AND OTHER EXAMS

If you have had sufficient experience, training, or study in a subject area, you may apply to take College Level Examination Program (CLEP) subject exams or CLEP general exams published by the College Entrance Examination Board in order to receive academic credit. CLEP exams are offered to entering freshmen during the summer orientation programs or by special arrangement on an individual basis with the Student Success Center (405) 425-5921. You also may take CLEP exams after the semester begins if you meet the written guidelines. See the listing at the end of the following guidelines for CLEP exams offered and courses for which credit may be obtained.

## CLEP GUIDELINES

A non-refundable payment of $\$ 30$ (subject to change without notice) for each CLEP exam must be made to OC at the time the test is given. Charges will not be added to your account.

Only those who are enrolled at OC or who have been accepted for admission to the university may receive credit by examination.

A minimum of 12 semester hours must be earned in class work at OC before credit earned by examination will be recorded.

You may not attempt credit by examination for courses that you have audited or in which you are, or have been, enrolled and in which you have attended any classes at OC or any other university. If you wish to take a CLEP exam for credit in a course in which you are currently enrolled, then you must drop the course
within the first week of the semester.

You may attempt to receive credit by CLEP examination again after three full months. Except where specifically provided for by a program, credit by examination may not be given in a course sequentially lower in the department or a prerequisite to a course for which you have received credit.

You may receive up to 60 semester hours of credit by examination. The amount you may take by correspondence or extension will be reduced accordingly.

Credit earned by proficiency examination does not count toward the resident requirement of 30 semester hours.

If you have taken and passed a course at an unaccredited institution and wish to validate that work through the procedures outlined in this policy, you may do so. This credit is considered equivalent to transfer work and does not satisfy the requirement calling for 30 semester hours in residence or the requirement calling for one half of the major at $O C$

## ADVANCED PLACEMENT EXAMINATIONS AND REQUIRED SCORES

| AP COURSE | SCORE | COURSE CODE | OC COURSE |
| :---: | :---: | :---: | :---: |
| Art History | 3 | ARTS-2013 | Survey of Visual Culture |
| Art/Studio/Drawing | 3 | ARTS-1113 | Fundamentals of Drawing |
| Biology | 3 | BIOL-1013 | Principles of Biology I |
| Biology | 4+ | BIOL-1013 \& 1023 | Principles of Biology I and II |
| Chemistry | 4 | CHEM-1115 | General Chemistry |
| Computer Science A | 3 | CMSC-1113 | Programming I |
| Computer Science B | 4 | CMSC-1113 \& 1123 | Programming I \& II |
| Computer Science Principles | 3 | CMSC-1313 | Software Engineering I Introduction |
| Economics/Macro | 3 | ECON-2113 | Macroeconomics |
| Economics/Micro | 3 | ECON-2213 | Microeconomics |
| English Language/Composition | 3 | ENGL-1113 | English Composition I |
| English Literature/Composition* | 3 | ENGL-1113 | English Composition I |
| European History | 3 | HIST-2923 | Perspectives in Western Civilization |
| French, Language | 3 | FRNC-1113 \& 1213 | Beginning French I \& II |
| German, Language | 3 | GERM-1113 \& 1213 | Beginning German I \& \\| |
| Government and Politics | 3 | POLS-2113 | American Government |
| Human Geography | 3 | GEOG-2113 | Elements of Human Geography |
| Math/Calculus AB | 3 | MATH-2114 | Calculus I with Analytical Geometry |
| Math/Calculus BC | 4 | MATH-2114 \& 2214 | Calc I and Calc. II with Analytical Geometry |
| Music/Listening/Literature | 3 | FINE-2913 | Perspectives in Fine Arts |
| Music Theory | 3 | MUSC-1023 | Fundamentals of Music Theory |
| Psychology | 3 | PSYC-1113 | General Psychology I |
| Physics 1 | 3 | PHYS-1114 | College Physics I |
| Physics 2 | 3 | PHYS-1214 | College Physics II |
| Physics/C Mechanics | 3 | PHYS-2514 | Physics I |
| Physics/C E\&M | 3 | PHYS-2614 | Physics II |
| Spanish Language | 3 | SPAN-1113 \& 1213 | Beginning Spanish I \& II |
| Statistical Methods | 3 | MATH-2913 | Statistical Methods |
| U.S. History | 3 | HIST-2213 or 2223 | History of the U.S. to 1877 or History of the U.S. since 1877 |
| U.S. History | 4 | HIST-2213 \& 2223 | History of the U.S. to 1877 and History of the U.S. since 1877 |
| World History | 3 | HIST-2923 | Perspectives in Western Civilization |

## CLEP TESTS OFFERED AT OC AND REQUIRED SCORES

You must pass CLEP examinations with a score determined by the university to receive course credit at OC. Credit received is recorded on your permanent record with a grade of "P" for passing. *No CLEP credit given for English Literature, ENGL-2213.

| SUBJECT EXAMINATIONS | OC REQ. SCORE | COURSE CODE | OC COURSE |
| :--- | :--- | :--- | :--- |
| American Government | 63 | POLS-2113 | Intro to American Government |
| Pre-Calculus | 61 |  <br> MATH-1523 | College Algebra/Trigonometry |
| Calculus | 64 | MATH-2114 | Calculus I with Analytical Geometry |
| College Algebra | 63 | MATH-1213 | College Algebra |
| College Mathematics | 62 | MATH-1143 | Elements of Mathematics I |
| College Composition Modular | 55 | ENGL-1113 | History of the U.S. to 1877 |
| History of U.S. I | 56 | HIST-22223 | Pistory of the U.S. Since 1877 |
| History of U.S. II | 57 | FINE-2913 | Principles of Biology I |
| Humanities | 56 | CHEM-1115 or <br> CHEM-1313 | General Chemistry I or |
| General Biology | 57 | ECON-2113 | Macroeconomic Principles |
| General Chemistry | 65 | ECON-2213 | Microeconomic Principles |
| Principles of Macroeconomics | PSYC-1113 | General Psychology I |  |
| Principles of Microeconomics | SOCI-1113 | Perspectives in Sociology |  |
| Introduction to Psychology | HIST-2923 | Perspectives in Western Civilization |  |
| Introduction to Sociology | 59 | HIST-2923 | Perspectives in Western Civilization |
| Western Civilization I: Near East-1648 | 57 | 56 |  |
| Western Civilization II: 1648 -Post WWII | 59 |  |  |
| NOTE: No CLEP tests will be accepted for upper division business courses. College Composition Modular can only be taken at OC. |  |  |  |
|  |  |  |  |

INTERNATIONAL BACCALAUREATE PROGRAM
Credit may be awarded to students who have taken higher-level courses in the International Baccalaureate Program and who have scored at least a 4 (on a 7 -point scale) on the higher-level course examination. Such credit generally is awarded on a course-by-course basis as recommended by the appropriate OC department. The following higher-level International Baccalaureate courses have been approved for credit without individual department review. International Baccalaureate transcripts should be submitted to the Office of the Registrar.

| INTERNATIONAL BACCALAUREATE <br> HIGHER-LEVEL COURSE | EQUIVALENT OC COURSE | MINIMUM <br> SCORE | SEMESTER <br> CREDIT HOURS |
| :--- | :--- | :--- | :--- |
| Biology | BIOL-1013 - Principles of Biology I and BIOL-1023-- Principles of Bio II | 4 | 6 |
| Chemistry | CHEM-1115 - General Chemistry | 4 | 5 |
| Economics | ECON-2113 - Macroeconomics | 4 | 3 |
| Higher Mathematics | MATH-2114 - Calculus I with Analytical Geometry | 4 | 4 |
| History-America | HIST-1223 - Turning Points in U.S. History | 4 | 3 |
| History-European | HIST-2923 - Western Civilization | 4 | 3 |
| Language A: English | ENGL-1113 - English Composition I | 4 | 3 |
| Music | MUSC-2013 - Music Appreciation | 4 | 3 |
| Physics | PHYS-1114 - College Physics | 4 | 4 |
| Social Anthropology | SOCI-1113 - Introduction to Sociology | 4 | 3 |

You can request transcripts through your high school International Baccalaureate coordinator for the first year after high school graduation. Thereafter, transcripts can be requested from the International Baccalaureate Program, North America, 475 Riverside Drive, Suite 1600, New York, NY 10115; (212) 696-4464. Website: www.ibo.org.

You should be aware that AP examinations, CLEP examinations, International Baccalaureate examinations, and college courses taken prior to or after enrolling at OC may be duplicative. In these cases, the university will award credit for only one specific course.

## DEPARTMENTALLY-PREPARED CHALLENGE EXAMS

Departmentally-prepared exams are extensive examinations over specific subjects or courses. Approval for the examination, the type of examination to be used, or for other work to be performed will be left to the department. Application forms are available in the Office of the Registrar.

The charge for credit under this policy will be a $\$ 20$ fee for the examination, whether passed or failed, and $\$ 10$ per semester hour of credit fee to record it on the transcript if it is passed. In case of validation of unaccredited work, the latter charge will not be made.

If you make a grade of "C" or above on a departmentally-prepared examination, the course will be recorded with credit given and a grade of " $P$ "" for passing. You may not attempt an examination in the same course more than one time.

## RETROACTIVE CREDIT

You may begin university study at the level appropriate to your background in foreign language or as part of a dual undergraduate/graduate degree program. Upon completion of foreign language course numbers 1213,2113 , or 2123 with a grade of "B" or better, or upon passing a departmentally-prepared exam, you may apply for retroactive credit for all previous courses in the foreign language sequence. Students completing coursework as part of a dual undergraduate/ graduate degree program may complete the graduate (5000-level) version of a course and apply for retroactive credit for the undergraduate (3000 or 4000 -level) version of the same course, provided that you earn a grade of " B " or better in the graduate course.] The application for such credit must be approved by the professor and the department chair or associate dean. You must then pay $\$ 10$ per semester hour in the Office of the Registrar to have the retroactive credit recorded.

## AIR FORCE ROTC CREDIT

AFROTC is a nationwide program that allows students to pursue commissions (become officers) in the United States Air Force (USAF) while simultaneously attending college. AFROTC classes are held on college campuses throughout the United States and Puerto Rico; students can register through normal course registration processes. AFROTC consists of four years of Aerospace Studies classes (Foundations of the USAF, Evolution of USAF and Space Power, Air Force Leadership Studies, and National Security Affairs/Preparation for Active Duty), and a corresponding Leadership Laboratory for each year (where students apply leadership skills, demonstrate command and effective communication, develop physical fitness, and practice military customs and courtesies). College students enrolled in the AFROTC program (known as "cadets") who successfully complete both AFROTC training and college degree requirements will graduate and simultaneously be commissioned as Second Lieutenants in the Active Duty Air Force.

The AFROTC program is currently offered at the University of Oklahoma, but they have a crosstown agreement that allows our students to enroll in AFROTC and become full-fledged cadet participants. For more information on AFROTC course descriptions, please review http://www.ou.edu/enrollment/ course_catalog.html and browse for the AERO classes. For more information on the AFROTC program, please review http://www.ou.edu/rotc/air-force.html.

## ARMY ROTC CREDIT

Two-, three-, and four-year programs are available to you through a cooperative agreement between Oklahoma Christian and the University of Central Oklahoma (UCO). This allows you to commute to UCO and attend Army ROTC classes while continuing to pursue your degree at OC.

Through the Army Reserve Officers' Training Corps Program (ROTC), the Department of Military Science offers two programs. After completion of the degree and the ROTC program, you will be commissioned as an officer in the United States Army, the Army Reserves, or the Army National Guard. For more information, contact UCO.

## CLASS ATTENDANCE <br> CLASS PERIODS

Class periods and class formats vary according to the number of credits given for the course. Typically, three-hour courses meet for three 50-minute periods a week, two-hour courses meet twice a week, and one-hour courses meet once a week. Another common pattern for three-hour courses is to meet two periods per week at one hour and 15 minutes each. With the university's approach to instruction, however, many variations on this standard plan for class meetings give variety in scheduling. The achievement expected of you, however, still conforms to the expectation implicit in the awarding of semester hours credit.

## ABSENCE POLICY

Attendance policies and penalties rest under the purview of the professor. Those professors who require attendance for your course must detail those requirements and penalties in your syllabi. Students who exceed the number of absences or otherwise fail to meet attendance policies will experience the consequences as the professor explains in the syllabus. These may include withdrawing you from a course if you miss more than a specified number of classes.

Faculty members are expected to establish reasonable absence policies. One fair model is to allow you to miss one week's worth of class before absences affect your grades. For example, if the class meets MWF, you would be allowed three absences without penalty.

Students who participate in OC activities should inform their professors in writing of the scheduled activities and absences the first week of class or as soon as possible. Professors should make every effort to work with those who conscientiously inform them of absences due to university activities. Absences due to official university activities such as intercollegiate athletic contests and musical performances should not penalize you per se. However, numerous absences may still affect test scores and other performance in any course.

## STUDENTS AND VA BENEFITS

In keeping with minimum standards set by the state, these following guidelines will be followed in reporting to the Veterans Administration regional offices the attendance and academic progress of those who receive VA benefits:

1. If you drop out of school, OC will report the last date attended to assure that payments are terminated no later than the date when you stop attending a course.
2. OC also will report when you fail to maintain satisfactory progress. You will be placed on academic alert and should make a 2.0 GPA at the end of that semester or raise your cumulative GPA to the level of good standing required for your classification.

If you have questions about your VA benefits, contact the Office of the Registrar at (405) 425-5206.

## CORE CURRICULUM

Oklahoma Christian's aim is to "take every thought captive to make it obedient to Christ" (II Cor. 10:5b). This means the faculty and the students are involved in an ongoing project to explore and promote the Christian worldview. In every discipline, Christ - the incarnate Word of God - and the Bible - the written Word of God - is the foundation of our intellectual growth and moral development. This knowledge of the Word of God is essential equipment for Christian scholars.

Secular education often is satisfied to create doubt and leave it unresolved. Fundamentalist education often is satisfied to retreat from doubt and deny that it exists. Christian education confronts doubt and seeks to overcome it to produce faith.

Therefore, the Oklahoma Christian community is committed to creating and communicating a Christian analysis of every discipline, believing that in doing
so, Christian students develop a bold faith and all students are exposed to a wider array of thought than they would encounter in most secular universities. No one is required to hold any position on scriptures or to agree with any application of them, but all are required to learn the information and skills necessary to meet the stated objectives. Professors seek to be open to and understanding of the views of students while affirming their own position. Faith is, therefore, the central concept in the core curriculum model. All of the specific objectives listed in each category are built on the central concept.

## STUDENTS WITH ASSOCIATE OR BACCALAUREATE DEGREES FROM ANOTHER INSTITUTION

If you transfer to OC with an associate degree designed to provide the core curriculum background for a baccalaureate degree, OC will consider the hours taken before coming to OC when determining your core curriculum requirements. The associate degree program must include at least 30 hours in courses typically required for the core curriculum with at least one course in the following seven categories: communication, math, American citizenship, behavioral/social science, literature/fine arts, science, and global civilization.

If you have fulfilled at least five of these categories prior to coming to OC, you will be able to complete courses on campus to fulfill up to two deficient areas in the seven categories. You also will be required to complete the following at OC: 6-8 hours of Bible to include BIBL-4523 - Capstone: Christ and His World. Those completing a second baccalaureate degree at OC will be covered by the same policy. You may transfer all approved courses from an accredited junior college. A maximum of 65 hours from a junior college will apply toward a degree.

Note: You must satisfy the specific course provisions for the B.S.E. and other programs requiring specific courses for the core curriculum.

## REQUIREMENTS FOR ALL BACCALAUREATE DEGREES

After consulting with an academic advisor, it is ultimately your responsibility to choose and implement your academic program and to see that all specific requirements for that program and all core curriculum requirements for graduation from the university have been met in an acceptable and timely manner. Requirements are as follows:

- You must have satisfied all entrance requirements.
- You must complete at least 126 semester hours.

Note: Freshmen and sophomores must enroll in a Bible course each semester. These classes may not be dropped.

## FIRST-TIME TRANSFER STUDENTS TO OC

Transfer students must take the following number of hours in Bible at OC: Transfer hours Required OC Bible hours
1 to 12 16*

13 to 31 14*
32 to 47 12*
48 to 63 10*
64 to 79 8*
80 or more 6*
Or reach the total of 16 hours, including transfer hours.
*The number of Bible hours required for transfer students is determined at the time of your initial enrollment at OC. Subsequent transfer hours do not affect the number of hours required.

- You must complete a minimum of 30 semester hours in a major and a minimum of 18 hours in a minor. At least one-half, or 22 hours (whichever is smaller), of the work in the major or major/minor program must be completed at OC. In majors that contain a specialization, at least three-fourths of the work required for that specialization must be completed at OC.
- Courses may satisfy requirements in the core and the major and/or the core and the minor (a process known as "double-dipping"). A minor requires at least 18 hours of additional unduplicated courses. If there are no common courses in the requirements for a major and the requirements for a minor, the
student may major and minor in the areas. When there are courses required in both the major and the minor, the student may not earn a major and minor in those areas.
- You must complete the core curriculum requirements as listed in the catalog.
- You must have at least 10 semester hours of courses numbered 3000 or above in your major field and a total of not less than 30 semester hours overall in such courses.
- You must have a total GPA on all courses of not less than 2.0 and the same overall average on all work done in the major field.
- You may not count toward graduation more than 15 semester hours with a grade of "D." If you have more than 15 hours of "D" grades in courses required for graduation, you must retake the specific course or courses to replace those "D" grades.
- You must complete at least 30 semester hours at OC (at least 15 of which must be in the senior year), be a full-time student for at least one semester, and be in attendance during the semester of graduation.
- You must have 2 science courses (6 hours total), one of which must include a lab.

You normally will follow the requirements of the catalog in effect at the time of admission to the university. No catalog will be binding for more than seven years. Therefore, at the point of graduation, you must meet the requirements of a catalog that has been in effect no more than seven years. Any exceptions must be approved by the dean of the student's college and the Registrar.

## SECOND BACCALAUREATE DEGREES AND DOUBLE MAJORS

For a second baccalaureate degree or a double major, you must first receive written approval from the dean(s) of the respective college(s) and then you must complete the requirements for the specific major with a minimum of 18 additional hours unique to the second degree or major beyond the first degree or major. A minimum of 144 total semester hours will need to be completed by the end of the second degree or major. Students not receiving their first bachelor's degree from Oklahoma Christian University will need to also complete 6 hours of Bible, to include BIBL-4523 - Capstone: Christ and His World.

If the second baccalaureate degree or second major would normally require a minor, each degree or major shall count as the minor for the other degree or major.

## POST-ENROLLMENT TRANSFER CREDIT

Students who are enrolled at OC may receive credit for courses taken at another institution, subject to the following restriction:

Obtain written approval on a Transfer Course Approval Form before registering for the courses at another institution.

Approval for courses within the major must come from the Department Chair or associate dean for that major.

Approval for core curriculum courses must come from the Registrar.

## LIMITATION OF TRANSFER CREDIT

Once a student begins at OC, he or she may not transfer in more than 15 hours of credit to count toward graduation, of which no more than 6 upper division hours of his or her major can be transferred back to OC. Transfer credit in the major must be approved by the student's major department, as explained above.

Specific departments may have additional transfer restrictions.

Only credit from a regionally accredited college or university will be accepted as transfer credit.

Technical or vocational credits are not eligible for transfer and may not, therefore, be used to satisfy degree requirements.

Current OC students must have transfer credit approved prior to enrolling in a
class away from the OC campus. A Transfer Request Approval Form is available online and in the Registrar's Office.

A course may not be taken at another college or university to replace a grade for any course that has been taken at OC except in extraordinary circumstances.

## REQUIREMENTS FOR GRADUATION

You must have completed all of your graduation requirements with a minimum of 126 hours prior to participating in commencement.

Commencement will be held on December 14, 2018, April 26, 2019 and August 16, 2019.

## BACHELOR OF ARTS DEGREE

To receive a Bachelor of Arts degree from OC, you must complete the following:

1. Meet the core curriculum requirements;
2. Meet the requirements for a major in one of the departments offering the Bachelor of Arts degree and
3. In addition to the other core curriculum requirements, complete two courses (minimum total of six hours) in the same foreign language. See page 21 for retroactive credit for foreign language.

## BACHELOR OF BUSINESS ADMINISTRATION DEGREE

To receive a Bachelor of Business Administration degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for a major offering a Bachelor of Business

Administration degree.

## BACHELOR OF FINE ARTS DEGREE

To receive a Bachelor of Fine Arts degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for a major offering a Bachelor of Fine Arts degree.

## BACHELOR OF MUSIC EDUCATION DEGREE

To receive a Bachelor of Music Education degree from OC, you must complete the following:

1. Meet the core curriculum requirements;
2. Meet the music department's requirements in music and music education; and
3. Meet the requirements for teacher certification.

## BACHELOR OF SCIENCE DEGREE

To receive a Bachelor of Science degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for a major in one of the departments offering the Bachelor of Science degree.

## BACHELOR OF SCIENCE IN COMPUTER ENGINEERING DEGREE

To receive a Bachelor of Science in Computer Engineering degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for the major in computer engineering.

## BACHELOR OF SCIENCE IN EDUCATION DEGREE

To receive a Bachelor of Science in Education degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for education in either elementary education, early childhood, or some field of secondary education.

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING DEGREE

To receive a Bachelor of Science in Electrical Engineering degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for the major in electrical engineering.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING DEGREE
To receive a Bachelor of Science in Mechanical Engineering degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for the major in mechanical engineering.

BACHELOR OF SCIENCE IN NURSING DEGREE
To receive a Bachelor of Science in Nursing degree from OC, you must complete the following:

1. Meet the core curriculum requirements; and
2. Meet the requirements for the major in nursing.

## UNDERGRADUATE AND GRADUATE DUAL DEGREES

To receive an undergraduate and graduate dual degree from OC, you must complete the following:

1. Meet the core curriculum requirements;
2. Meet the requirements for the undergraduate major; and
3. Meet the requirements for the graduate major.

## STUDENTS WITH DISABILITIES

OC seeks to be learner-friendly for students with disabilities. If you have diagnosed disabilities, you should direct your inquiries to Katy Roybal at (405) 425-1876. Disability documentation must be provided from an appropriately qualified professional (i.e., physician, psychiatrist, or psychologist). Each semester, you must meet with Ms. Roybal to establish a specific accommodation plan. OC seeks to be helpful and cooperative. Nevertheless, the responsibility for learning rests with you and you must take the initiative to arrange for the accommodations. For specific policies, see the ADA Handbook, which is available in the Office of Student Life.

## STUDENT SUCCESS CENTER

Oklahoma Christian University's Student Success Center partners with academic programs to promote personal and academic responsibility as students navigate through their university experience toward graduation. Features include the Bridge Mentoring Program, academic coaching, academic recovery, disability services, learning assistants, supplemental instruction, tutors and mentors, and a testing center.

## BRIDGE PROGRAM

Students with composite ACT scores of 18 and below may apply to be admitted through the Bridge Program. The aims of the Bridge Program are to alert you to the academic issues that may impede your progress toward completion of a degree and to provide the academic support resources necessary to help you succeed. The Bridge Program Director will mentor you in an effort to prepare you for success in university-level work and will oversee required study sessions, which are an integral part of the Bridge Program.

If you are admitted through the Bridge Program, you may start in either the fall or spring semester. You will take the following courses in that semester:

COMMUNICATION, 5 HOURS
SDEV-1102 Personal and Professional Strategies for Success
SDEV-0123 Developmental Writing
or
ENGL-1113 English Composition I
(Based on ACT English subscore)
MATHEMATICS, 3 HOURS
SDEV-0103 Intermediate Algebra or appropriate math
(Based on ACT Math subscore.)
BIBLE, 2 HOURS
BIBL-1212 Life of Christ: Matthew

## AS DETERMINED BY ADVISOR, 2-3 HOURS

Students have the option of adding one additional course with the director's approval. Students will continue to have meetings with the director and receive
academic support services through successful completion of 64 credit hours.

## STUDENT DEVELOPMENT COURSES

Students with low ACT scores will be placed in special courses to help them begin where they need to start in writing and math. These courses are described below.

## WRITING

OC is committed to helping you meet the fundamental objective of effective written communication. The university requires students with an English ACT of 18 or lower to enroll in SDEV-0123 - Developmental Writing before enrolling in ENGL-1113 - English Composition I. Developmental Writing allows you to master basic grammar skills and gain confidence needed to succeed in the core curriculum's communication sequence and other university-level courses. Students enrolled in SDEV-0123 must achieve a grade of "P" (Passing) before enrolling in ENGL-1113.

## MATHEMATICS

OC requires that you have proficiency in and understanding of mathematics. You must complete a mathematics requirement. The required course varies according to the specialized needs of the major curriculum.

Students in business and sciences programs must have MATH-1213 - College Algebra.

Most others must complete MATH-1143 - Elements of Mathematics I or MATH1153 - Elements of Mathematics II.

To assist students who are not adequately prepared for the required mathematics course, OC offers a developmental math course. Intermediate Algebra (SDEV-0103) is required for those with a Math ACT subscore of 22 or lower as preparation for one of the mathematics courses that satisfy the university's core curriculum requirements. This course reviews high school algebra, including polynomials, equation solving, and graphing. This course is graded with a grade of "P" (Passing) or a grade of "NP" (Not Passing). This course does not satisfy the core curriculum mathematics requirement.

## ENGLISH AS A SECOND LANGUAGE FOR INTERNATIONAL STUDENTS

Oklahoma Christian University provides intensive English for Academic Purposes (EAP) courses for international undergraduate and graduate students. OC facilitates English as a Second Language (ESL) students to develop the necessary English proficiency that will lead to success in all their academic endeavors. In order to meet these goals, OC students practice rigorous academic tasks such as research writing, oral presentations, and participating in group discussions and projects. Ultimately, students gain the necessary skills for a successful academic career at Oklahoma Christian University through classroom instruction, conversation partners, cultural experiences, and social events.

The curriculum not only prepares students for university credit classes, but also allows for University credit while at OC. Classes consist of a core curriculum of reading, writing, grammar, and oral communication. In addition, students will have an opportunity, based on English level proficiency, to earn academic credit in a variety of select elective courses offered at the University.

## STUDY ABROAD PROGRAMS

The mission of OC's Office of International Programs is to deepen and broaden the intellectual, social, spiritual, and aesthetic awareness of students and faculty as they study, travel, and serve in other cultures. Eligible students will have completed a minimum of two semesters at OC with a 2.0 GPA . Students must be enrolled in a minimum of six credit hours throughout a summer study abroad program and a minimum of 12 credit hours throughout a semester study abroad program.

Please refer to the chart on the following page for a list of study abroad courses approved for the core curriculum. In order to meet the above mission, OC offers the following programs:

## EUROPE

OC's European Studies Programs are great opportunities to experience much of the history and culture that Europe has to offer. Students receive college credit as they study, travel, and serve overseas in one of the oldest and most important cultures in the world. OC is home at Das Millicanhaus, the university's living learning facility in Vienna, Austria. The program may also include academic field trips to places such as London, Poland, and Italy. Best of all, the European Studies Programs are offered in the fall or spring semester and during the summer term. Students can choose whatever fits best for their schedules, but are required to take CLTR-2103, GERM-1113, and BIBL-3053.

## ASIA

Programs in Asia provide once-in-a lifetime adventures as students travel to several countries across the Pacific Rim. Short and long term offerings may include China, Japan, or South Korea. Asia studies is only offered in the summer.

## LATIN AMERICA

HonduraServe is a unique opportunity for students to spend two weeks in May in a practicum-type experience. Open to all majors, this trip is especially geared towards education, nursing, science, Spanish, and TEFL majors.

## STUDY AND TRAVEL COURSES

At OC, you have opportunities to study a specific discipline in a unique setting. Some of the courses involve international study while others will take place in the U.S. These programs range from one to six weeks. Some occur every year while others are one-time offerings. Past trips have included Eagles on Wall Street, the Canadian Shakespeare trip, Spring Break in Costa Rica, and Civil Rights. Go to www.oc.edu/studyabroad to see current and future offerings.

## COUNCIL OF CHRISTIAN COLLEGES AND UNIVERSITIES PROGRAMS

Through OC's affiliation with the Council of Christian Colleges and Universities (CCCU), you may apply to participate in a number of outstanding special study programs, described below. Up to four OC students per semester may apply to participate in CCCU programs. If more than four students express interest, the International Programs Committee will decide which students may apply for a CCCU program in a given semester.

For more information, contact the Office of the Chief Academic Officer or the Office of International Programs. Students who participate in a CCCU study abroad program should plan their returning semester's schedule prior to leaving the country, or should make plans to access the OC online schedule from abroad. Please note: Oklahoma Christian University institutional scholarships and institutional grants you receive cannot be applied to tuition charges, etc. related to the CCCU programs.

You may apply for a number of outstanding special study programs. For more information, go to https://www.bestsemester.com.

STUDY ABROAD COURSES IN CORE CURRICULUM

| STUDY ABROAD COURSES | BA | BFA | BS | BSE | BSN | BME | BBA | $\begin{aligned} & \text { BSCE } \\ & \text { BSEE } \\ & \text { BSME } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HIST 2903 <br> Studies in European Civilization | Western Civilization | Civilization or Liberal Arts | Western Civilization or Liberal Arts | Liberal Arts |  |  | Liberal Arts | Psychology, <br> Social <br> Sciences, Fine <br> Arts, Foreign <br> Language, or <br> Liberal Arts |
| FINE 2903 Aesthetics | Great Works | Great Works or Liberal Arts | Great Works or Liberal Arts |  | Great Works | Great Works |  | Psychology, Social Sciences, Fine Arts, Foreign Language, Great Works, or Liberal Arts |
| BIBL 3053 <br> Christianity and Culture | Bible Elective | Bible Elective | Bible Elective | Bible Elective | Bible Elective | Bible Elective | Bible Elective | Bible Elective |
| GEOG 2513 <br> Human <br> Geography of the Pacific Rim | Non-Western Civilization | Civilization or Liberal Arts | Non-Western Civilization or Liberal Arts | Liberal Arts |  | Non-Western Civilization | Liberal Arts | Psychology, <br> Social <br> Sciences, Fine <br> Arts, Foreign <br> Language, or <br> Liberal Arts |
| CLTR 2103 <br> Cross Cultural <br> Perspectives |  | Liberal Arts | Liberal Arts | Liberal Arts |  |  | Liberal Arts | Psychology, Social <br> Sciences, Fine Arts, Foreign Language, or Liberal Arts |
| GERM 1113 <br> German I <br> JAPN 1103 <br> Conversational Japanese |  | Liberal Arts | Liberal Arts | Liberal Arts |  |  | Liberal Arts | Psychology, Social Sciences, Fine Arts, Foreign Language, or Liberal Arts |
| ENGL 2213 <br> Perspectives in Literature | Great Works | Great Works or Liberal Arts | Great Works | Great Works | Great Works | Great Works | Great Works | Great Works or Liberal Arts |
| COMM 1213 <br> Oral <br> Communication | Communication | Communication | Communication | Communication | Communication | Communication | Communication | Communication |
| INTL 3313 <br> International <br> Business |  |  |  |  |  |  | International <br> Business |  |

## ACADEMIC PROGRAMS OVERVIEW

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| Accounting Finance (B.B.A.) | Social Studies Education (B.S.E.) |
| Finance (B.B.A.) |  |
| Finance (B.B.A.) and Mathematics (B.S.) | DEPARTMENT OF INTERDISCIPLINARY STUDIES .................................... 134 |
| General Business (B.B.A.) | Interdisciplinary Studies (B.A., B.S.) |
| International Business (B.B.A.) | Performing Arts Management (B.A.) |
| Accounting emphasis |  |
| Finance emphasis | DEPARTMENT OF LANGUAGE \& LITERATURE ........................................ 138 |
| Management emphasis | English (B.A.) |
| Marketing emphasis | English Education (B.S.E.) |
| Management (B.B.A.) | English Pre-Law emphasis (B.A.) |
| Marketing Management (B.B.A.) | English/Teaching English as a Foreign Language (B.A.) |
| Advertising emphasis | English/Writing (B.A.) |
| Marketing Management emphasis | Spanish (B.A.) |
| Professional Selling emphasis |  |
| Technology Mediated Marketing emphasis | DEPARTMENT OF MUSIC ...................................................................... 144 |
| Sports Management (B.B.A.) | Music (B.A.) |
| Sport, Wellness, \& Recreation (B.S.) | Music Education (B.M.E.) Instrument emphasis |
| COLLEGE OF ENGINEERING \& COMPUTER SCIENCE............................. 59 | Vocal emphasis |
| DEPARTMENT OF COMPUTER SCIENCE ............................................. 60 |  |
| Computer Science (B.S.) | DEPARTMENT OF PSYCHOLOGY \& FAMILY SCIENCE .............................. 148 |
| Computer Science with Business (B.S.) | Family Science (B.S.) |
| Computer Science with Gaming \& Animation (B.S.) | Family Science/Human Development (B.S.) |
|  | Psychology (B.A., B.S.) |
| DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING................ 65 |  |
| Computer Engineering (B.S.C.E.) | SCHOOL OF EDUCATION ....................................................................... 153 |
| Computer Engineering with Software emphasis | Early Childhood Education (B.S.E.) |
| Electrical Engineering (B.S.E.E.) | Elementary Education (B.S.E.) |
| Electrical Engineering with Software emphasis | Secondary Education (B.S.E) |
| DEPARTMENT OF MATHEMATICS........................................................ 70 | COLLEGE OF NATURAL \& HEALTH SCIENCES..................................... 161 |
| Mathematics (B.S.) | DIVISION OF NATURAL SCIENCES ....................................................... 162 |
| Mathematics/Computer Science (B.S.) | Biochemistry (B.S.) |
| Mathematics (B.S.) and Finance (B.B.A.) | Biology (B.S.) |
| Mathematics Education (B.S.E.) | Cellular \& Molecular Biology (B.S.) |
| DEPARTMENT OF MECHANICAL ENGINEERING....................................... 75 | Forensic Science (B.S.) |
| Mechanical Engineering (B.S.M.E.) | Nutrition and Exercise Science (B.S.) |
|  | Science Education (B.S.E.) |
| GRADUATE SCHOOL OF ENGINEERING \& COMPUTER SCIENCE................ 77 | Biology |
| Dual degrees (B.S./M.S.C.S., B.S.C.E.MM.S.E., B.S.E.E.MM.S.E.) | Physical Science |
| COLLEGE OF LIBERAL ARTS ............................................................ 107 | DIVISION OF HEALTH SCIENCES ........................................................ 171 |
| DEPARTMENT OF ART \& DESIGN ........................................................ 108 | Medical Laboratory Science (B.S.) |
| Art (B.F.A.) | SCHOOL OF NURSING.................................................................... 173 |
| Gaming \& Animation (B.A., B.F.A.) | Nursing (B.S.N.) |
| Communication Design (B.F.A., B.S.) | Prelicensure Track |
| Digital Arts (B.F.A.) | RN to BSN Compentency Based Track |
| Interior Architecture (B.F.A.) |  |
| Visual Art (B.A.) |  |
| Art emphasis |  |
| DEPARTMENT OF COMMUNICATION $\qquad$ .117 |  |
| Mass Communication (B.S.)Public Relations |  |
|  |  |
| Mass Communication Electronic Media (B.S.) |  |
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## HONORS PROGRAM

Oklahoma Christian University recognizes that students arrive on campus with a wide range of academic skills and differing levels of intellectual curiosity.
To challenge students who are highly motivated to excel academically, the faculty developed the Honors Program, a unique curriculum by which students achieve the objectives of the general education core curriculum. The progran's curriculum replaces most of the core curriculum. OC graduates of the Honors Program will:

1. Read critically and well, inside and outside of their major.
2. Do effective research.
3. Communicate with confidence in formal and informal settings.
4. Connect their academic and intellectual life with their faith.
5. Demonstrate mastery of foundational knowledge of the history, art, and culture of Western Civilization.
6. Demonstrate understanding of the Bible in relation to other ancient literature.
7. Demonstrate understanding of the relations between Christian faith and science.
8. Demonstrate understanding of the Christian faith in relation to other worldviews.
9. Demonstrate awareness of and sensitivity to the complexities of race, class, and gender in our society.

Admission to the program is based on a high school GPA of 3.5 or higher, a minimum ACT of 28 or SAT of 1310 , evidence of writing skills, and an interview.
Professors of Honors courses encourage a high level of participation, require much independent research, and mentor students to write and speak effectively as they develop the ability to think analytically and critically.

Each course in the Honors Program is team-taught, interdisciplinary, and crafted to give you a broad understanding of intellectual and cultural developments and to encourage focused research on specific issues related to a Christian worldview. In addition to the specific courses, you participate in a symposium each week where you have the opportunity to expand your vision of life and your pursuit of intellectual excellence.

The advantages of the Honors Program include small classes, challenges to solve problems, and interaction with other serious and thoughtful students. Students interact readily with their professors in Honors courses. All the professors cooperate to help you understand your abilities and your potential. The program provides intellectual growth, close contact with equally motivated peers, significant interaction with professors, and an enlarged view of the world. Honors students receive a one-time $\$ 1,000$ travel stipend to be used exclusively for OC-sponsored Study Abroad programs. First-year Honors students are eligible for a one-time OG\&E Scholarship, the amount of which is determined based on a student's demonstrated financial need per the FAFSA.

Students in the Honors Program fill important roles of leadership throughout the campus in all kinds of organizations. They are often leaders within their majors as well.

The Honors House at Davisson Hall offers a men's wing and a women's wing for development of a living-learning community that enhances the curriculum with peermentoring by Honors staff.

To graduate as an Honors Fellow, students must complete the OC Honors Program with a cumulative GPA of 3.4 or higher. Students must maintain a GPA of 3.00 to keep their standing in the Honors program.

The Honors curriculum substitutes for the university's core curriculum.

## HONORS CORE CURRICULUM <br> 47 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

THE HONORS CURRICULUM REPLACES
THE UNIVERSITY'S CORE CURRICULUM.

BIBLE ELECTIVE, 6 HOURS
Take 6 hours of Bible
BIBLE CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

COMMUNICATION, 3 HOURS
ENGL-1113 English Composition I
Majority have prior learning credit

MATHEMATICS, 3 HOURS
3 hours appropriate to major
SCIENCE COURSE WITH LAB, 3 HOURS
INTERNATIONAL EXPERIENCE, 3 HOURS
Study abroad program that includes HONR-4113 Honors Experience or
3 hours foreign langauge
HONORS COURSES, 26 HOURS
HONR-1010 Symposium I HONR-1020 Symposium II

The Honors curriculum is enriched by a carefully focused co-curriculum of museum visits, an annual visit to the Philharmonic, an annual retreat for first year students and other events.

# COLLEGE OF BIBLICAL STUDIES 

The Bible and Bible-related subjects occupy the central place in the university curriculum. A complete education includes a study of spiritual matters. Because the Bible is the only book in which God reveals Himself to us, it is the book that sets forth in supreme fashion how people are to live in relation to Him and to others.

Through the College of Biblical Studies and various spiritual activities, the university seeks to develop in individuals a desire for truth and to guide them in the path that leads to a discovery of truth. The university faculty seeks to develop in students a strong commitment to Jesus Christ and, through such commitment, to prepare them for service in the home, church, and community.

Courses present the Bible as the inspired word of God. Related courses deal with introductory and background materials in order that the message of the Bible may be better understood. Biblical Greek and Hebrew are taught so that those who so desire may study the Bible in the languages in which it was first written. Courses dealing with the practical side of Christianity are offered so the student may translate theory.

## AREAS OF STUDY

Bible (BIBL)
Children's Ministry (CMIN)
Greek (GREK)
Hebrew (HBRW)
Missions (MISS)
Youth and Family Ministry (YTMN)

## DEGREES OFFERED

B.A. Degree in Bible
B.A. Degree in Bible and Ministry
B.A. Degree in Children's Ministry
B.A. Degree in Preaching Ministry
B.A. Degree in Youth Ministry

## SECOND MAJOR ONLY

Missions
Vocational Ministry

## MINORS

Bible
Biblical Languages
Church History
Missions
Non-textual Bible
Youth Ministry

GRADUATE SCHOOL OF THEOLOGY
M.A.C.M. Master of Arts in Christian Ministry
M.Div. Master of Divinity
M.T.S. Master of Theological Studies

For more information, email graduateprograms@oc.edu.

## FACULTY

Jim Baird, D.Phil., Director of Honors Program, Distinguished Professor of Bible and Philosophy
Alden Bass, Ph.D., Assistant Professor of Bible
Robert Carpenter, Ph.D., Professor of Missions
Dudley Chancey, Ph.D., Professor of Youth Ministry
Jim Dvorak, Ph.D., Associate Dean for Teaching and Learning, Chair of the
Graduate School for Theology, Professor of Bible
John Harrison, Ph.D., Professor of New Testament and Ministry
Chip Kooi, Ph.D., Professor of Bible
Lynn McMillon, Ph.D., Distinguished Professor of Bible
Charles Rix, Ph.D., Dean of the College of Biblical Studies, Associate Professor of Bible
Grant Testut, Ph.D., Associate Professor of Bible

## LOCATION

Williams Branch Center for Biblical Studies

## DEAN

Charles Rix, Ph.D., Dean of the College of Biblical Studies, Associate
Professor of Bible

## DEAN'S OFFICE

Williams Branch Center for Biblical Studies, Office 110

## B.A. DEGREE IN BIBLE - 47-48 HOURS, MINOR REQUIRED, PLUS 6 ADDITIONAL HOURS IN BIBLICAL LANGUAGES

This is a basic program for those preparing for religious service.
An OC graduate with a Bachelor of Arts degree in Bible will:

1. Organize biblical content chronologically and thematically.
2. Exegete (analyze) biblical texts in a contextually informed manner.
3. Organize and present biblical material in a contemporary and relevant manner.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 18 HOURS BIBLE

BIBL-2713
BIBL-3013
BIBL-3203
BIBL-3823
BIBL-3913
BIBL-4753 Seminar in Christian Ministry
2-3 HOURS EVANGELISM

| BIBL-2512 | Personal Evangelism |
| :--- | :--- |
| BIBL-3063 | Evangelism and Discipleship |

9 HOURS MINIMUM OLD TESTAMENT TEXTUAL COURSES
12 HOURS MINIMUM NEW TESTAMENT TEXTUAL COURSES

3 HOURS REQUIRED NON-TEXTUAL BIBLE
BIBL-4713 Restoration Movement
3 HOURS OTHER NON-TEXTUAL BIBLE COURSES
6 HOURS, BIBLICAL LANGUAGES
A student must take 6 hours of Greek or 6 hours of Hebrew in addition to the above requirements for the B.A. degree.
GREK-1113 Elementary Greek I

GREK-1213 Elementary Greek II
HBRW-3113 Elementary Hebrew I
HBRW-3213 Elementary Hebrew II (May also count as Old
Testament textual)

## UNIVERSITY CORE CURRICULUM <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major
REQUIRED BIBLE, 8 HOURS
used in major
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testamen
BIBL-2302 Story of the New Testament

```
BIBLE ELECTIVE,5 HOURS
used in major
5 hours of Bible courses, except Missions
Experience
```

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| used in major |  |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. History |
| GREAT WORKS, 6 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 | Perspectives in Literature |
| :---: | :---: |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL PSYC-1113 | SCIENCE, 3 HOURS General Psychology I |
| WESTERN C HIST-2923 | IVILIZATION, 3 HOURS Perspectives in Western Civilization |
| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| GEOG-2113 | Elements of Human Geography |
| $\begin{aligned} & \text { GEOG-2213 } \\ & \text { HIST-2613 } \end{aligned}$ | World Regional Geography The Modern Middle East |

MISS-3513 World Religions MISS-3613 Cultural Anthropology MISS-3673 New Religious Movements MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.A. DECREE IN BIBLE AND MINISTRY <br> 74-75 HOURS, PLUS 6 ADDITIONAL HOURS IN BIBLICAL LANGUAGES

The degree prepares students for the work of a local minister and lays a foundation for graduate studies. It is also the recommended degree for those who have not yet defined a specific area of ministry.

An OC graduate with a Bachelor of Arts degree in Bible and Ministry will:

1. Organize biblical content chronologically and thematically.
2. Exegete (analyze) biblical texts in a contextually informed manner.
3. Organize and present biblical material in a contemporary and relevant manner.
4. Communicate the content and message of scripture by means of teaching and preaching.
5. Implement/exercise essential ministry skills such as counseling and relating to people.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 21 HOURS BIBLE |  |
| :---: | :---: |
| BIBL-2713 | Introduction to Ministry |
| BIBL-3013 | Hermeneutics |
| BIBL-3203 | Biblical Exegesis |
| BIBL-3823 | Counseling for Ministers |
| BIBL-3913 | Homiletics I: Preparation and Delivery of Religious Speeches |
| BIBL-4753 | Seminar in Christian Ministry |
| BIBL-4763 | Homiletics II: Advanced Homiletics |
| 2-3 HOURS EVANGELISM |  |
| BIBL-2512 | Personal Evangelism |
| BIBL-3063 | Evangelism and Discipleship |
| 3 HOURS CHOSEN FROM |  |
| BIBL-3253 | Teaching the Bible |
| BIBL-4213 | Teaching the Bible to Adolescents |
| 9 HOURS OLD TESTAMENT TEXTUAL |  |
| 12 HOURS NEW TESTAMENT TEXTUAL |  |
| 6 HOURS ELECTIVE TEXTUAL COURSES |  |
| 3 HOURS REQUIRED NON-TEXTUAL |  |
| BIBL-4713 | Restoration Movement |

## 21 HOURS BIBLE

BIBL-2713 Introduction to Ministry
Hermeneutics
BIBL-3823 Counseling for Ministers
BIBL-3913 Homiletics I: Preparation and Delivery of Religious Speeches
BIBL-4753 Seminar in Christian Ministry
BIBL-4763 Homiletics II: Advanced Homiletics

2-3 HOURS EVANGELISM
$\begin{array}{ll}\text { BIBL-2512 } & \text { Personal Evangelism } \\ \text { BIBL-3063 } & \text { Evangelism and Discipleship }\end{array}$
3 HOURS CHOSEN FROM
BIBL-3253 Teaching the Bible
BIBL-4213 Teaching the Bible to Adolescents
9 HOURS OLD TESTAMENT TEXTUAL
12 HOURS NEW TESTAMENT TEXTUAL
6 HOURS ELECTIVE TEXTUAL COURSES

BIBL-4713
Restoration Movement

## 9 HOURS OTHER NON-TEXTUAL

3 HOURS PRACTICUM
BIBL-4803 Ministry Practicum

## 6 HOURS BIBLICAL LANGUAGES

A student must take 12 hours of Greek or 6 hours of Greek and 6 hours of Hebrew in addition to the above degree requirements for the B.A. in Bible and Ministry.
GREK-1113 Elementary Greek I
GREK-1213 Elementary Greek II
GREK-2113 Intermediate Greek I
(May also count as New Testament textual)
GREK-2213 Intermediate Greek II
(May also count as New Testament textual)
HBRW-3113 Elementary Hebrew I
HBRW-3213 Elementary Hebrew II
(May also count as Old Testament textual)

## FOREIGN LANGUAGE

A student must take 6 hours of any foreign language in addition to the above requirements for the BA degree in Children's Ministry.

## UNIVERSITY CORE CURRICULUM <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

Appropriate to major
REQUIRED BIBLE, 8 HOURS
used in major
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## bible elective, 5 HOURS

used in major
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| used in major |  |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. History |
| GREAT WORKS, 6 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theatre |

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human

## B.A. DEGREE IN CHILDREN'S MINISTRY 71-72 HOURS, PLUS 6 ADDITIONAL HOURS IN FOREIGN LANGUAGE

This major is for those wishing to work primarily in the children's ministry program of the church. It combines study of the biblical text with practical application courses in several disciplines. The purpose of the children's ministry major at OC is to equip students to minister to children, parents, and families in the local church setting.

An OC graduate with a Bachelor of Arts degree in Children's Ministry will be able to:

1. Plan and deploy a yearly program of activities that reinforce the core values of the Christian faith.
2. Articulate and apply a written philosophy of ministry that involves parents and volunteers.
3. Differentiate the knowledge of family issues between those that need professional care and those that do not.
4. Articulate the methodology of teaching the Bible using age appropriate methods, themes, and elements that contribute to learning.
5. Define and illustrate methods of leadership and service to families, the church, and the community.
6. Work in unison with a multi-staff church.
7. Research and represent methods that assist parents in carrying out their God-given duty to spiritually form their children.
8. Evaluate and distinguish methods, laws, and curriculum that affect ministry to children, parents, and family.
9. Demonstrate and articulate techniques of exegesis and hermeneutics to present practical and effective biblical lessons and presentations.
10. Demonstrate proficiency in the use of learning techniques of lesson planning, organization, illustration, stories, and multi-media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 18 HOURS BIBLE |  |
| :--- | :--- |
| BIBL-2713 | Introduction to Ministry |
| BIBL-3013 | Hermeneutics |
| BIBL-3203 | Biblical Exegesis |
| BIBL-3823 | Counseling for Ministers |
| BIBL-3913 | Homiletics I: Preparation and Delivery of <br>  <br> BIBL-4753 |
|  | Religious Speeches |
| 2-3 HOURS EVANGELISM |  |
| BIBL-2512 | Personal Evangelism Christian Ministry |
| BIBL-3063 | Evangelism and Discipleship |

9 HOURS OLD TESTAMENT TEXTUAL

## 12 HOURS NEW TESTAMENT TEXTUAL

6 HOURS NON-TEXTUAL BIBLE
BIBL-3413 Christian Family
BIBL-4713 Restoration Movement

## 3 HOURS PSYCHOLOGY

PSYC-3523 Developmental Psychology
19 HOURS CHILDREN'S MINISTRY
CMIN-1202 Introduction to Children's Ministry
CMIN-2122 Teaching the Bible to Preschoolers Birth-5 Years
CMIN-2222 Teaching the Bible to Elementary Children Grades 1-6
CMIN-3213 Curriculum Development for Children's Ministry
CMIN-3403 Leadership \& Administration of Children's Ministry
CMIN-3612 Spiritual Development of Children
CMIN-4313 Volunteers, Parents, and Staff in Youth and Family Ministry
CMIN-4412 Vital Issues in Children's Ministry
2 HOURS INTERNSHIP
CMIN-4822 Children's Ministry Practical Experience
6 HOURS FOREIGN LANGUAGE
A student must take 6 hours of any foreign language in addition to the above requirements for the BA degree in Children's Ministry.

## COMMUNICATION, 9 HOUR

ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major
REQUIRED BIBLE, 8 HOURS
used in major
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

used in major
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS <br> used in major <br> BIBL-4523 | Capstone: Christ and His <br> World |
| :--- | :--- |
| POLITICAL |  |
| SCIENCE, 3 HOURS <br> POLS-2113 <br> Introduction to <br> American Government |  |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. History |


| MISS-3513 | World Religions |
| :--- | :--- |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious Movements |
| MUSC- 3213 | Perspectives in World Music |
|  |  |
| *For more information on how to apply study |  |
| abroad trips to the core curriculum, see the |  |
| chart on page 25. |  | abroad trips to the core curriculum, see the chart on page 25

## B.A. DEGREE IN PREACHING MINISTRY <br> 74-75 HOURS, PLUS 6 ADDITIONAL HOURS IN BIBLICAL LANGUAGES

The Preaching Ministry major is specifically designed for students who want to do public and pulpit preaching. The major will prepare a student very well for general ministry, but is intentional in specifically equipping and enhancing the student's homiletic skills.

An OC graduate with a Bachelor of Arts degree in Preaching Ministry will:

1. Organize biblical content chronologically and thematically.
2. Exegete (analyze) biblical texts in a contextually informed manner.
3. Organize and present biblical material in a contemporary and relevant manner.
4. Prepare and deliver sermons that exemplify proficiency in biblical and theological thought as well as communication/rhetorical skill.
5. Demonstrate skill in the non-preaching duties of a minister, an understanding of the culture in the church today, and effective work with leadership elders.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


## B.A. DEGREE IN YOUTH MINISTRY <br> 71-72 HOURS, PLUS 6 ADDITIONAL HOURS IN BIBLICAL LANCUAGES

The major in youth ministry offers students an opportunity to make special preparation to serve as youth ministers while laying a strong foundation in a study of the Bible and Bible-related subjects. The purpose of the youth ministry major at OC is to equip students to minister with adolescents and their families.

An OC graduate with a Bachelor of Arts degree in Youth Ministry will be able to:

1. Compile and keep updated a list of 10 (or more) current resources for acquiring knowledge and facts about youth and family culture in North America.
2. Produce a one-year calendar for youth and family ministry.
3. Interview authorities trained in the field of counseling to understand who is available in their city.
4. Employ resources (i.e., Dare 2 Share, YLM, SWAT) designed to teach youth how to share the Gospel with their peers.
5. Implement spiritual disciplines for one's own spiritual formation and help others do the same.
6. Develop lesson plans and teach the Bible in a manner relevant to the specific needs of youth.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 15 HOURS BIBLE |  |
| :---: | :---: |
| BIBL-2713 | Introduction to Ministry |
| BIBL-3013 | Hermeneutics |
| BIBL-3203 | Biblical Exegesis |
| BIBL-3823 | Counseling for Ministers |
| BIBL-4753 | Seminar in Christian Ministry |
| 2-3 HOURS EVANGELISM |  |
| BIBL-2512 | Personal Evangelism |
| BIBL-3063 | Evangelism and Discipleship |
| 3 HOURS CHOSEN FROM |  |
| BIBL-3253 | Teaching the Bible |
| BIBL-3913 | Homiletics I: Preparation and Delivery of Religious Speeches |
| 6 HOURS REQUIRED |  |
| BIBL-4213 | Teaching the Bible to Adolescents |
| YTMN-4823 | Youth Ministry Internship |
| 9 HOURS CHOSEN FROM |  |
| YTMN-2123 | Counseling Adolescents |
| YTMN-2213 | Introduction to Youth and Family Ministry as a Profession |
| YTMN-2233 | Experiential Teaching Methods in the Outdoors |
| YTMN-3113 | Evangelism, Discipleship, and Spiritual Formation with Adolescents |
| YTMN-3213 | Models and Programming in Youth Ministry |
| YTMN-4113 | Adolescent Spirituality, Morality, and Culture |


| YTMN-4313 | Volunteers, Parents, and Staff in Youth and Family Ministry |
| :---: | :---: |
| 3 HOURS PRACTICUM REQUIRED |  |
| YTMN-4813 | Youth Ministry Teaching Practicum |
| 3 HOURS REQUIRED |  |
| BIBL-3413 | Christian Family |
| 3 HOURS CHOSEN FROM |  |
| FMST-2423 | Parent-Child Relations |
| FMST-3913 | Family Development |
| 6 HOURS PSYCHOLOGY |  |
| PSYC-1113 | General Psychology I |
| PSYC-3523 | Developmental Psychology |
| 6 HOURS OLD TESTAMENT TEXTUAL |  |
| 9 HOURS NEW TESTAMENT TEXTUAL |  |
| 6 HOURS ELECTIVE TEXTUAL |  |
| 6 HOURS BIBLICAL LANGUAGES |  |
| A student must take 6 hours of Greek or 6 hours of Hebrew in addition to the above requirements for the B.A. in Youth Ministry |  |
| GREK-1113 | Elementary Greek I |
| GREK-1213 | Elementary Greek II |
|  | or |
| HBRW-3113 | Elementary Hebrew I |
| HBRW-3213 | Elementary Hebrew II |

## UNIVERSITY CORE CURRICULUM

B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| Appropriate to major |  |
| REQUIRED BIBLE, 8 HOURS |  |
| used in major |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old Testament |
| BIBL-2302 | Story of the New Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| used in major |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |



| MUSC-2013 | Music Appreciation |
| :---: | :---: |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL SCIENCE, 3 HOURS |  |
| used in major PSYC-1113 | General Psychology I |
| WESTERN C <br> HIST-2923 | VILIZATION, 3 HOURS Perspectives in Western Civilization |
| $\begin{aligned} & \text { NON-WESTE } \\ & \text { GEOG-2113 } \end{aligned}$ | RN CIVILIZATION, 3 HOURS Elements of Human Geography |
| GEOG-2213 | World Regional Geography |
| HIST-2613 | The Modern Middle East |

## MISSIONS

## 34 HOURS TAKEN ONLY AS A SECOND MAJOR

This second major in Missions, provides an acquaintance with the biblical text and the necessary auxiliary studies to allow special preparation for mission work.
An OC graduate with any degree and a second major in Missions will:

1. Communicate biblical truths effectively to people from cultural backgrounds different from their own.
2. Identify cultural similarities and differences and the impact these have on service to others.
3. Explain how New Testament Christianity functions in different cultural contexts through gaining experience in campaigns, mission internships, and, in some cases, overseas study opportunities.
4. Articulate/explain the role of the church in God's plan of salvation.

| 9 HOURS REQUIRED |  | MISS-3153 | Urban Ministry |
| :---: | :---: | :---: | :---: |
| BIBL-3063 | Evangelism and Discipleship | MISS-3673 | New Religious Movements |
| MISS-3513 | World Religions | MISS-4113 | The Local Church and Missions |
| MISS-3613 | Cultural Anthropology | MISS-4633 | Intercultural Communication I |
|  |  | MISS-4743 | International Social Entrepreneurship |
| 3 HOURS CHOSEN FROM |  | MISS-4813 | Missions Experience |
| MISS-3213 | Church Growth |  |  |
| MISS-3313 | Cross Cultural Ministry | 16 HOURS |  |
| 6 HOURS MISSIONS ELECTIVES CHOSEN FROM |  | Any course offered in the College of Biblical Studies that hasn't been previously taken. |  |
| MISS-3003 | Vocational Ministry |  |  |
| MISS-3013 | Mission Preparation |  |  |
| MISS-3033 | Biblical Missions Methods |  |  |
| MISS-3113 | Women in Missions |  |  |

This second major is designed specifically for people planning careers in non-religious fields such as teaching, engineering, medicine, law, business, sciences, communication, or fine arts, but who desire a deeper knowledge of God's Word and ministry in order to strengthen the cause of Christ wherever they live and work.

An OC graduate with any degree and second major in vocational ministry will:

1. Demonstrate a broader understanding of the Scriptures.
2. Demonstrate methodologies and critical thinking skills designed to improve ministries and solve problems in the field.
3. Choose, practice, and enhance his or her profession from a Kingdom perspective.

## 34 HOURS FROM THE COLLEGE OF BIBLICAL STUDIES

Any course offered in the College of Biblical Studies may count toward this major regardless of prefix (BIBL, CMIN, GREK, HBRW, MISS, YTMN).

MUST INCLUDE 15 HOURS MINIMUM OF TEXTUAL COURSES
to provide needed scheduling flexibility.
MUST INCLUDE 15 HOURS MINIMUM OF UPPER DIVISION COURSES
to provide needed scheduling flexibility, some courses meet both requirements, but do not receive double credit hours.

Core curriculum courses in Bible may be counted in these totals.
The following five courses are recommended, but not required:
BIBL-2512 Personal Evangelism
BIBL-3003 Vocational Ministry
BIBL-3823 Counseling for Ministers
BIBL-3913 Homiletics I: Preparation \& Delivery of Religious
MISS 2013 Speeches
Mission Preparation

## MINOR REQUIREMENTS - COLLEGE OF BIBLICAL STUDIES

## BIBLE MINOR 25 HOURS

## TAKE 25 HOURS OF BIBLE COURSES

Textual or non-textual; this may not include children's ministry, missions, or youth ministry courses. This includes 16 hours of the core curriculum Bible as well as 9 additional hours.

BIBLICAL LANGUAGES MINOR 18 HOURS
12 HOURS OF NEW TESTAMENT GREEK

| GREK-1113 | Elementary Greek I |
| :--- | :--- |
| GREK-1213 | Elementary Greek II |
| GREK-2113 | Intermediate Greek I |
| GREK-2213 | Intermediate Greek II |
| 6 HOURS OF HEBREW |  |
| HBRW-3113 | Elementary Hebrew I |
| HBRW-3213 | Elementary Hebrew II |
| CHURCH HISTORY mINOR 18 HOURS |  |
| CHOSEN FROM | The New Testament Church |
| BIBL-3113 | Church History to 1517 |
| BIBL-3173 | Church History 1517 to Present |
| BIBL-3183 | History of the Bible |
| BIBL-4513 | Restoration Movement |
| BIBL-4713 | Renaissance and Reformation, 1400-1648 |
| HIST-3913 | Medieval Europe, 400-1300 |
| HIST-4613 |  |

## MISSIONS MINOR 18 HOURS

12 HOURS CHOSEN FROM MISSIONS COURSES OTHER THAN MISSIONS EXPERIENCE
6 HOURS CHOSEN FROM THE FOLLOWING COURSES
BIBL-3013 Hermeneutics
BIBL-3113 The New Testament Church
BIBL-3713 Contemporary Ethics
BIBL-3823 Counseling for Ministers
BIBL-4713 Restoration Movement
MISS-4813 Missions Experience

NON-TEXTUAL BIBLE MINOR 18 HOURS
18 HOURS FROM A MINIMUM OF TWO OF THE FOLLOWING AREAS:
children's ministry, church history, missions, and youth ministry
YOUTH MINISTRY MINOR 18 HOURS
3 HOURS REQUIRED
BIBL-2713 Introduction to Ministry
AT LEAST 6 HOURS CHOSEN FROM
YTMN-3113 Evangelism, Discipleship, and Spiritual Formation with Adolescents
YTMN-4113 Adolescent Spirituality, Morality, and Culture
YTMN-4313 Volunteers, Parents, and Staff in Youth and Family Ministry

9 HOURS FROM OTHER COURSES IN YOUTH MINISTRY OR ANY COURSE IN CHILDREN'S MINISTRY

Note: Courses counted in a Bible major or other major requiring courses listed in the College of Biblical Studies may not be counted in a minor.

# COLLEGE OF bUSINESS ADMINISTRATION 

AREAS OF STUDY
Accounting (ACCT)
Business Administration (BUSA)
Economics (ECON)
Finance (FINC)
Information Systems (INFO)
International Business (INTL)
Management (MGMT)
Marketing (MKTG)
Sports Management (SPMG)
Sport, Wellness, and Recreation (SPWR)

## DEGREES OFFERED

B.B.A. Degree in Accounting
B.B.A. Degree in Accounting/Finance
B.B.A. Degree in Finance
B.B.A./B.S. Degrees in Finance and Mathematics
B.B.A. Degree in General Business
B.B.A. Degree in International Business
B.B.A. Degree in International Business w/ Accounting Emphasis
B.B.A. Degree in International Business w/ Finance Emphasis
B.B.A. Degree in International Business w/ Management Emphasis
B.B.A. Degree in International Business w/ Marketing Emphasis
B.B.A. Degree in Management
B.B.A. Degree in Marketing Management w/ Advertising Emphasis
B.B.A. Degree in Marketing Management $w /$ Marketing Management Emphasis
B.B.A. Degree in Marketing Management w/ Professional Selling Emphasis
B.B.A. Degree in Marketing Management w/ Technology Mediated Marketing Emphasis
B.B.A. Degree in Sports Management
B.S. Degree in Sport, Wellness, and Recreational

## GRADUATE SCHOOL OF BUSINESS

M.Acc. Master of Accountancy
M.B.A. Master of Business Administration

For more information regarding graduate studies in the College of Business
Administation, email graduateprograms@oc.edu

## MINORS

Accounting
Finance
General Business
International Business
Management Marketing
Sport, Wellness, and Recreation

FACULTY
Mickey Cowan, M.B.A., C.P.A., Professor of Accounting
Donald V. Drew, Ed.D., Professor of Business
Jody L. Jones, Ed.D., Professor of Finance
Elaine D. Kelly, M.B.A., C.P.A., Associate Dean of the College of Business
Administration, Associate Professor of Accounting
Phillip V. Lewis, Ed.D., Professor of Business
Wes McKinzie, M.A., Instructor of Business
Kimberly Merritt, D.B.A., Professor of Business
Kerianne Roper, D.B.A., Professor of Business
Jeffery Simmons, D.B.A., Dean of the College of Business Administration, Professor of Business
Burt Smith, Ed.D., C.M.E., C.Q.M., Professor of Marketing
Daniel Sorensen, D.B.A., C.P.A., Associate Professor of Accounting

## LOCATION

Harvey Business Center

## DEAN

Jeffery Simmons, D.B.A., Dean of the College of Business Administration, Professor of Business
Elaine D. Kelly, M.B.A., C.P.A., Associate Dean of the College of Business Administration, Associate Professor of Accounting

## DEAN'S OFFICE

Harvey Business Center, Room 101
This is an exciting time to be at Oklahoma Christian University. There seem to be no boundaries to knowledge, innovation, and technology.

The College of Business Administration is purposely people driven and focused on achieving excellence. It incorporates the mission of OC and promotes the values of faith, scholarship, integrity, stewardship, and global awareness.

The College of Business Administration builds on existing strengths exceptional faculty, integral real-world experience, strong relationships with alumni and the community, a highly technological format for work and study, a uniquely metropolitan area, and more. We maximize our strengths and opportunities and minimize weaknesses and threats. We provide rigorous academic learning opportunities for all students. We graduate leaders of integrity who have an exceptional work ethic and who contribute in significant ways to our community, state, nation, and world.

We are dedicated to character, leadership, innovation, and hard work. We provide a distinctly Christian education that truly enriches the lives of our graduates. We prepare educated problem solvers and equip them to lead in business. Our ultimate success is measured by the impact we have on internal and external constituents and the region. Our achievements are
evidenced through the accomplishments of our graduates, the recognitions and professional accreditations given to our programs, the academic recognition of our faculty, and our commitment to facilitating a genuine learning environment. Upon graduation from OC and the College of Business Administration, students have received a general education in liberal arts, are grounded in the knowledge of business, and have encountered opportunities for integrating learning into a workable framework within the context of the Christian faith consistent with the Word of God.

The B.B.A. degrees in the College of Business Administration are accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The B.S. degree is not accreditated by the ACBSP, but is accreditated by HLC.

## SPORT MAJORS:

The B.B.A. in Sports Management is accredited by both the Higher Learning Commission and the ACBSP. It operates in cooperation and coordination with other sports-related programs at OC not operated under ACBSP rules for program content. See also the B.S. degree in Nutrition and Exercise Science in the College of Natural and Health Sciences; the B.S. degree in Sport, Wellness, and Recreation in the College of Business Administration; and the B.A. and B.S. degrees in Interdisciplinary Studies in the College of Liberal Arts, where sports can be organized as an emphasis area in one of these disciplines.

## 4+1 Degree Information

Undergraduate business students in a $4+1$ degree will be allowed to apply to a College of Business Administration graduate program and admitted to College of Business Administration graduate classes if: 1) the student has 90 hours or more of undergraduate credits, 2) the student has a minimum 3.0 grade point average, and 3 ) the student has met all necessary course prerequisites. Continued progress toward the completion of the undergraduate business degree will be reviewed by the graduate chair.

## GENERAL INFORMATION FOR THE B.B.A. DEGREE

Requirements for the B.B.A. degree can be divided into three categories:

## UNIVERSITY CORE CURRICULUM REQUIREMENTS

All B.B.A. students must satisfy all core curriculum requirements.

## BUSINESS FOUNDATION REQUIREMENTS

All B.B.A. students must complete the 46 hours of business core classes listed in the following section.

## SPECIALIZED OR MINOR REQUIREMENTS

Students majoring in accounting, finance, international business, management, and/or marketing management are required to complete specialized course work
in those fields. Students majoring in general business also must complete the requirements for a minor.

## GRADE REQUIREMENTS FOR B.B.A. DEGREE

All required specialized courses in the accounting, accounting/finance, finance, international business, management, marketing management, majors must be completed with a grade of " C " or better. To continue in the upper core, a student must not have more than 15 semester hours of " D " grades.

Accounting and accounting/finance majors are required to make a grade of "C" or better in ACCT-2113 and ACCT-2213.

Management majors are required to make a grade of " C " or better in MGMT-3113.

Marketing Management majors are required to make a grade of " C " or better in MKTG-3313.

Accounting/Finance and Finance majors are required to make a grade of "C" or better in FINC-3313.

International Business majors are required to make a grade of " $C$ " or better in INTL-3313.

All students enrolling in BUSA-4513 and MGMT-4613 must be in their last year and eligible for graduation, with no more than 15 hours of " D " grades in their degree program.

## GENERAL INFORMATION FOR THE B.S. DEGREE

Requirements for the B.S. degree can be divided into two categories:

## UNIVERSITY CORE CURRICULUM REQUIREMENTS

All B.S. students must satisfy all core curriculum requirements.

## MINOR REQUIREMENTS

Students majoring in Sport, Wellness, and Recreation must complete the requirements for a minor.

## B.B.A. DEGREE IN ACCOUNTING 76 HOURS

Students following this program are prepared for entry-level positions in public, private, or governmental accounting. Educational requirements to sit for the Certified Public Accountant (CPA) examination currently vary among states. All students sitting for the CPA exam in the State of Oklahoma are required to have 150 hours of college credit, including 36 hours of upper-level accounting courses. You may fulfill this requirement by enrolling in the MAcc or MBA program during the last semester of your senior year or taking additional undergraduate hours.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |
|  |  |
| 3 HOURS CAPSTONE |  |
| MGMT-4613 | Strategic Management |


| 21 HOURS SPECIALIZED |  |
| :--- | :--- |
| ACCT-3113 | Intermediate Accounting I |
| ACCT-3213 | Intermediate Accounting II |
| ACCT-3413 | Income Taxation |
| ACCT-3513 | Advanced Federal Taxation |
| ACCT-4113 Advanced Accounting I <br> ACCT-4413 Auditing <br> ACCT-4513 Financial Accounting Statement Analysis <br>   <br> 6 HOURS SPECIALIZED CHOSEN FROM  <br> ACCT-3713 Accounting Information Systems <br> ACCT-4213 Advanced Accounting II <br> ACCT-4313 Advanced Cost Accounting <br> ACCT-4423 Ethics and Auditing Concepts <br>   <br> 6 HOURS REQUIRED  <br> ACCT-3313 Cost Accounting <br> INFO-3613 Management Information System <br>   |  |

MGMT-4613 Strategic Management

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS |  |
| used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |

COMMUNICATION, 9 HOURS
English Composition
ENGL-1213 English Composition I

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

## STATISTICS, 3 HOURS

used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN ACCOUNTING/FINANCE <br> 100 HOURS

Students following this program are prepared for entry-level positions in public, private, or governmental accounting. Educational requirements to sit for the Certified Public Accountant (CPA) examination currently vary among states. All students sitting for the CPA exam in the State of Oklahoma are required to have 150 hours of college credit, including 36 hours of upper-level accounting courses. You may fulfill this requirement by enrolling with a double major in accounting and finance.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION | ACCT-4113 | Advanced Accounting I |
| :---: | :---: | :---: |
| ACCT-2113 Accounting Principles I | ACCT-4413 | Auditing |
| ACCT-2213 Accounting Principles II |  |  |
| BUSA-1211 Introduction to Business | 6 HOURS SPECIALIZED ACCOUNTING ELECTIVES CHOSEN FROM |  |
| ECON-2113 Macroeconomic Principles | ACCT-3713 | Accounting Information Systems |
| ECON-2213 Microeconomic Principles | ACCT-4313 | Advanced Cost Accounting |
|  | ACCT-4213 | Advanced Accounting II |
| 9 HOURS MATH | ACCT-4423 | Ethics and Auditing Concepts |
| MATH-1213 College Algebra | 3 HOURS BUSINESS ELECTIVES |  |
| MATH-2113 Business Calculus |  |  |
| MATH-2913 Statistical Methods | INFO-3113 | Principles of Electronic Business |
|  | MGMT-3213 | Operations Management |
| 21 HOURS UPPER DIVISION | 12 HOURS SPECIALIZED FINANCE COURSES |  |
| BUSA-3213 Business Law | ACCT-4513 | Financial Accounting Statement Analysis |
| BUSA-3713 Business Ethics | FINC-4113 | Advanced Financial Management |
| COMM-3113 Business and Professional Communication | FINC-4313 | Financial Markets and Institutions |
| FINC-3313 Principles of Finance <br> INTL-3313 International Business | FINC-4613 | Financial Modeling |
| MGMT-3113 Principles of Management | 9 HOURS SPECIALIZED FINANCE ELECTIVES CHOSEN FROM |  |
| Principles of Marketing | ACCT-4213 | Advanced Accounting II |
|  | FINC-3513 | Money and Banking |
| 3 HOURS CAPSTONE | FINC-3613 | Investment Analysis |
| MGMT-4613 Strategic Management | FINC-3813 | Personal Finance |
| 21 HOURS SPECIALIZED | FINC-4123 | International Finance |
| ACCT-3113 Intermediate Accounting I | FINC-4513 | Topics in Finance |
| ACCT-3213 Intermediate Accounting II | FINC-4713 | Principles of Insurance |
| ACCT-3313 Cost Accounting | 3 HOURS REQUIRED |  |
| ACCT-3413 Income Taxation | INFO-3613 | Management Information Systems |
| ACCT-3513 Advanced Federal Taxation |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

| BIBLE ELECTIVE, 5 HOURS <br> 5 hours of Bible courses, except Missions Experience |
| :---: |
| CAPSTONE, 3 HOURS <br> BIBL-4523 Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS POLS-2113 Introduction to American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. His |

GREAT WORKS, 3 HOURS
ENGL-2213
Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113
General Psychology I
BUSINESS COMMUNICATION, 3 HOURS

| used in major |  |
| :--- | :--- |
| COMM-3113 | Business and Professional |
| Communication |  |

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
BUSINESS COMMUNICATION, 3 HOURS
used in major
Business and Professional Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN FINANCE 76 HOURS

The finance major promotes the development of effective practitioners. Graduates go directly to the work force in the financial services sector or business financial management. Others find finance helpful for graduate business, law, and other professional fields.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 9 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2113 | Business Calculus |
| MATH-2913 | Statistical Methods |
| 21 HOURS UPPER DIVISION  <br> BUSA-3213 Business Law <br> BUSA-3713 Business Ethics <br> COMM-3113 Business and Professional Communication <br> FINC-3313 Principles of Finance <br> INTL-3313 International Business <br> MGMT-3113 Principles of Management <br> MKTG-3313 Principles of Marketing <br>   <br> 3 HOURS CAPSTONE  <br> MGMT-4613 Strategic Management <br> 12 HOURS SPECIALIZED courSES  <br> ACCT-4513 Financial Accounting Statement Analysis <br> FINC-4113 Advanced Financial Management <br> FINC-4313 Financial Markets and Institutions <br> FINC-4613 Financial Modeling |  |

9 HOURS SPECIALIZED FINANCE COURSES CHOSEN FROM
FINC-3513 Money and Banking
FINC-3613 Investment Analysis
FINC-3813 Personal Finance
FINC-4123 International Finance
FINC-4513 Advanced Topics in Finance
FINC-4713 Principles of Insurance
3 HOURS CHOSEN FROM
ACCT-3113 Intermediate Accounting I
ACCT-3413 Income Taxation
MATH-4113 Probability and Statistics
6 HOURS BUSINESS

| ACCT-3313 | Cost Accounting I |
| :--- | :--- |
| INFO-3613 | Management Information Systems |

Finance Major with a concentration in actuarial science
For the current finance major, this would only require a mathematics minor. Mathematics Minor:
Suggested courses: MATH 2114 - Calculus I, MATH 2214 - Calculus II, MATH 2314 - Calculus III, MATH 4113 - Probability and Statistics I, and either MATH 4213 - Probability and Statistics II or MATH 3513 - Linear Algebra

Students interested in actuarial science may complete a mathematics major with a minor in finance with suggested courses or a finance major with a minor in mathematics with suggested courses. Talk to your academic advisor for a list of suggested courses.

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions

Experience \begin{tabular}{l}
CAPSTONE, 3 HOURS <br>

| BIBL-4523 | Capstone: Christ and His |
| :--- | :--- |
| World |  | <br>


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  | <br>


| AMERICAN | HISTORY, 3 HOURS |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |

\end{tabular}

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

## STATISTICS, 3 HOURS

used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN FINANCE AND B.S. DEGREE IN MATHEMATICS 116 HOURS

For program description and learning outcomes for the B.B.A. degree in Finance, see page 41.
For program description and learning outcomes for the B.S. degree in Mathematics, see page 71.
Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


## UNIVERSITY CORE CURRICULUM: <br> B.B.A. \& B.S. CORE - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament


GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113
COMM-3113 Business and Professiona Business and Pr
Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
used in major
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.B.A. DEGREE IN GENERAL BUSINESS <br> 52 HOURS, MINOR REQUIRED

This program is a general one, preparing the student for entry into industrial or governmental organizations, but without specialization in a specific discipline.
An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |


| MGMT-3113 | Principles of Management |
| :--- | :--- |
| MKTG-3313 | Principles of Marketing |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience
CAPSTONE, 3 HOURS

| Capstone: Christ and His |
| :--- |
| BIBL-4523 |
| World |

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN INTERNATIONAL BUSINESS <br> 79 HOURS

The International Business major prepares students to work in a global environment, both domestic and foreign. The specialization develops skills for navigating complex international business and management issues and develops intercultural competencies uncommon among most business students.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS

| BEHAVIORAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| PSYC-1113 | General Psychology I |


| BUSINESS COMMUNICATION, 3 HOURS |  |
| :--- | :--- |
| used in major |  |
| COMM-3113 | Business and Professional <br> Communication |.

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN INTERNATIONAL BUSINESS WITH ACCOUNTING EMPHASIS 79 HOURS

The International Business major prepares students to work in a global environment, both domestic and foreign. The specialization develops skills for navigating complex international business and management issues and develops intercultural competencies uncommon among most business students.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS  <br> used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |

COMMUNICATION, 9 HOURS
English Composition
ENGL-1213 English Composition I

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

| CABL-4523 | Capstone: Christ and His |
| :--- | :--- |
| World |  |


| POLITICAL SCIENCE, 3 HOURS |  |
| :--- | :--- |
| POLS-2113 | Introduction to <br> American Government |
| AMERICAN HISTORY, 3 HOURS  <br> HIST-1223 Turning Points in U.S. History |  |.

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS used in major
COMM-3113 Business and Professional Communication

## STATISTICS, 3 HOURS

used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN INTERNATIONAL BUSINESS WITH FINANCE EMPHASIS 79 HOURS

The International Business major prepares students to work in a global environment, both domestic and foreign. The specialization develops skills for navigating complex international business and management issues and develops intercultural competencies uncommon among most business students.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |
|  |  |
| 3 HOURS CAPSTONE |  |
| MGMT-4613 | Strategic Management |


| 12 HOURS SPECIALIZED INTERNATIONAL BUSINESS |  |
| :--- | :--- |
| INTL-4123 | International Finance |
| INTL-4413 | International Management |
| INTL-4723 | Global Marketing |
| INTL-4743 | International Social Entrepreneurship |

3 HOURS INTERNATIONAL EXPERIENCE
INTL-3123 International Business Experience
INTL-4993 Internship in International Business
*to be determined in consultation with academic advisor
6 HOURS OF THE SAME MODERN FOREIGN LANGUAGE
6 HOURS REQUIRED BUSINESS

| ACCT-3313 | Cost Accounting |
| :--- | :--- |
| INFO-3613 | Management Information Systems |
|  |  |
| 9 HOURS FINANCE EMPHASIS |  |
| FINC-3513 | Money and Banking |
| FINC-4113 | Advanced Financial Management |
| FINC-4313 | Financial Markets |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN INTERNATIONAL BUSINESS WITH MANAGEMENT EMPHASIS 79 HOURS

The International Business major prepares students to work in a global environment, both domestic and foreign. The specialization develops skills for navigating complex international business and management issues and develops intercultural competencies uncommon among most business students.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION | 12 HOURS SPECIALIZED INTERNATIONAL BUSINESS |
| :---: | :---: |
| ACCT-2113 Accounting Principles I | INTL-4123 International Finance |
| ACCT-2213 Accounting Principles II | INTL-4413 International Management |
| BUSA-1211 Introduction to Business | INTL-4723 Global Marketing |
| ECON-2113 Macroeconomic Principles | INTL-4743 International Social Entrepreneurship |
| ECON-2213 Microeconomic Principles |  |
|  | 3 HOURS INTERNATIONAL EXPERIENCE |
| 6 HOURS MATH | INTL-3123 International Business Experience |
| MATH-1213 College Algebra | INTL-4993 Internship in International Business |
| MATH-2913 Statistical Methods | *to be determined in consultation with academic advisor |
| 21 HOURS UPPER DIVISION | 6 HOURS OF THE SAME MODERN FOREIGN LANGUAGE |
| BUSA-3213 Business Law |  |
| BUSA-3713 Business Ethics | 6 HOURS REQUIRED BUSINESS |
| COMM-3113 Business and Professional Communication | ACCT-3313 Cost Accounting |
| FINC-3313 Principles of Finance | INFO-3613 Management Information Systems |
| INTL-3313 International Business | 3 HOURS MANAGEMENT EMPHASIS REQUIRED |
| MGMT-3113 Principles of Management | MGMT-3213 Operations Management |
| MKTG-3313 Principles of Marketing | MGMT-3213 Operations Management |
| 3 HOURS CAPSTONE | 6 HOURS MANAGEMENT UPPER DIVISION ELECTIVES |
| MGMT-4613 Strategic Management | 6 hours courses numbered 3000 or above not already taken |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS  <br> used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |

communcaton, h hours
English Composition
ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

| CIBL-4523 | Capstone: Christ and His |
| :--- | :--- |
| World |  |


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |.

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS used in major
COMM-3113 Business and Professional Communication

## STATISTICS, 3 HOURS

used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN INTERNATIONAL BUSINESS WITH MARKETING EMPHASIS 79 HOURS

The International Business major prepares students to work in a global environment, both domestic and foreign. The specialization develops skills for navigating complex international business and management issues and develops intercultural competencies uncommon among most business students.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |


| 12 HOURS SPECIALIZED INTERNATIONAL BUSINESS |  |
| :--- | :--- |
| INTL-4123 | International Finance |
| INTL-4413 | International Management |
| INTL-4723 | Global Marketing |
| INTL-4743 | International Social Entrepreneurship |

3 HOURS INTERNATIONAL EXPERIENCE
INTL-3123 International Business Experience
INTL-4993 Internship in International Business
*to be determined in consultation with academic advisor
6 HOURS OF THE SAME MODERN FOREIGN LANGUAGE
6 HOURS REQUIRED BUSINESS

| ACCT-3313 | Cost Accounting |
| :--- | :--- |
| INFO-3613 | Management Information Systems |

9 HOURS MARKETING UPPER DIVISION ELECTIVES
9 hours courses numbered 3000 or above not already taken
3 HOURS CAPSTONE
MGMT-4613 Strategic Management

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
$\begin{array}{ll}\text { BIBL-4523 } & \begin{array}{l}\text { Capstone: Christ and His } \\ \text { World }\end{array} \\ \text { POLITICAL } & \text { SCIENCE, } 3 \text { HOURS } \\ \text { POLS-2113 } & \text { Introduction to } \\ & \text { American Government }\end{array}$
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN MANAGEMENT 67 HOURS

The Management program is oriented toward the behavioral and organizational aspects of industrial, commercial, and institutional organizations. This degree is for students preparing for a career in supervisory and management positions.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |


| 3 HOURS CAPSTONE |  |
| :--- | :--- |
| MGMT-4613 | Strategic Management |
|  |  |
| 12 HOURS OF SPECIALIZED MANAGEMENT |  |
| MGMT-3213 | Operations Management |
| MGMT-3323 | Entrepreneurship and Small Business |
|  | Management |
| MGMT-4313 | Organizational Behavior |
| MGMT-4513 | Human Resource Management |
|  |  |
| 6 HOURS OF SPECIALIZED ELECTIVE CHOSEN FROM |  |
| MGMT-3533 | Issues in Management |
| MGMT-4413 | International Management |
| MGMT-4993 | Internship in Management |
|  |  |
| 6 HOURS REQUIRED |  |
| ACCT-3313 | Cost Accounting |
| INFO-3613 | Management Information Systems |

## UNIVERSITY CORE CURRICULUM: B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS  <br> used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology

BUSINESS COMMUNICATION, 3 HOURS used in major
COMM-3113 Business and Professional Communication

## STATISTICS, 3 HOURS

used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN MARKETING MANAGEMENT WITH ADVERTISING EMPHASIS 76 HOURS

The Marketing Management program prepares students for traditional marketing, promotion, sales, sales management, and marketing research responsibilities. This specialization develops skills for the recognition and analysis of marketing problems, both from the organizational and external market perspectives.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 3 HOURS ENGLISH |  |
| ENGL-3493 | Technical Writing |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |
|  |  |
| 3 HOURS CAPSTONE |  |
| MGMT-4613 | Strategic Management |

MGMT-4613 Strategic Management

| 6 HOURS REQUIRED | SPECIALIZED |
| :--- | :--- |
| INFO-3113 | Principles of Electronic Business |
| MGMT-3213 | Operations Management |
| 12 HOURS OF SPECIALIZED REQUIRED  <br> MKTG-3413 Consumer Behavior <br> MKTG-3713 Sales Management and the Sales Process <br> MKTG-4513 Marketing Research <br> MKTG-4613 Marketing Management <br> 3 HOURS MARKETING COMMUNICATION  <br> COMM-2113 Writing for Media <br> 9 HOURS ELECTIVES CHOSEN FROM  <br> ARTS-3333 History of Design <br> COMM-3733 Media Marketing and Sales <br> MKTG-4313 Promotional Strategies <br> MKTG-4993 Internship in Marketing <br>   |  |
|  |  |

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## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

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COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
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## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History


ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN MARKETING MANAGEMENT WITH MARKETING MANAGEMENT EMPHASIS - $\mathbf{7 6}$ HOURS

The Marketing Management program prepares students for traditional marketing, promotion, sales, sales management, and marketing research responsibilities. This specialization develops skills for the recognition and analysis of marketing problems, both from the organizational and external market perspectives.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  | 6 HOURS REQUIRED SPECIALIZED |  |
| :---: | :---: | :---: | :---: |
| ACCT-2113 | Accounting Principles I | INFO-3113 | Principles of Electronic Business |
| ACCT-2213 | Accounting Principles II | MGMT-3213 | Operations Management |
| BUSA-1211 | Introduction to Business |  |  |
| ECON-2113 | Macroeconomic Principles | 12 HOURS OF SPEC | LIZED REQUIRED |
| ECON-2213 | Microeconomic Principles | MKTG-3413 | Consumer Behavior |
|  |  | MKTG-3713 | Sales Management and the Sales Process |
| 6 HOURS MATH |  | MKTG-4513 | Marketing Research |
| MATH-1213 | College Algebra | MKTG-4613 | Marketing Management |
| MATH-2913 | Statistical Methods | 3 HOURS MARKETING COMMUNICATION |  |
|  |  |  |  |
| 3 HOURS ENGLISH |  | COMM-2113 | Writing for Media |
| ENGL-3493 | Technical Writing | 9 HOURS ELECTIVES CHOSEN FROM |  |
|  |  |  |  |
| 21 HOURS UPPER DIVISION |  | COMM-3733 | Media Marketing and Sales |
| BUSA-3213 | Business Law | MGMT-3323 | Entrepreneurship and Small Business Management |
| BUSA-3713 | Business Ethics | MKTG-3513 | E-Commerce and Online Marketing |
| COMM-3113 | Business and Professional Communication | MKTG-4313 | Promotional Strategies |
| FINC-3313 | Principles of Finance | MKTG-4723 | Global Marketing |
| INTL-3313 | International Business | MKTG-4993 | Internship in Marketing |
| MGMT-3113 | Principles of Management | PSYC/SOCI-3413 | Social Psychology |
| MKTG-3313 | Principles of Marketing | Other advisor appro | d course |

3 HOURS CAPSTONE
MGMT-4613 Strategic Management

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNCCATON, HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition I
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```



GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25

## B.B.A. DEGREE IN MARKETING MANAGEMENT WITH PROFESSIONAL SELLING EMPHASIS - 76 HOURS

The Marketing Management program prepares students for traditional marketing, promotion, sales, sales management, and marketing research responsibilities. This specialization develops skills for the recognition and analysis of marketing problems, both from the organizational and external market perspectives.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 3 HOURS ENGLISH |  |
| ENGL-3493 | Technical Writing |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |


| 3 HOURS CAPSTONE |  |
| :---: | :---: |
| MGMT-4613 | Strategic Management |
| 6 HOURS REQUIRED SPECIALIZED |  |
| INFO-3113 | Principles of Electronic Business |
| MGMT-3213 | Operations Management |
| 12 HOURS OF SPECIALIZED REQUIRED |  |
| MKTG-3413 | Consumer Behavior |
| MKTG-3713 | Sales Management and the Sales Process |
| MKTG-4513 | Marketing Research |
| MKTG-4613 | Marketing Management |
| 12 HOURS PROFESSIONAL SELLING |  |
| COMM-3733 | Media Marketing and Sales |
| MGMT-3323 | Entrepreneurship and Small Business Management |
| PSYC/SOCI-3413 | Social Psychology |
| 3 hours of internship | or advisor approved course |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN MARKETING MANAGEMENT WITH TECHNOLOGY MEDIATED MARKETING EMPHASIS - 76 HOURS

The Marketing Management program prepares students for traditional marketing, promotion, sales, sales management, and marketing research responsibilities. This specialization develops skills for the recognition and analysis of marketing problems, both from the organizational and external market perspectives.

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 3 HOURS ENGLISH |  |
| ENGL-3493 | Technical Writing |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| COMM-3113 | Business and Professional Communication |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |
| 3 HOURS CAPSTONE |  |
| MGMT-4613 | Strategic Management |


| 6 HOURS REQUIRED SPECIALIZED |  |
| :---: | :---: |
| INFO-3113 | Principles of Electronic Business |
| MGMT-3213 | Operations Management |
| 12 HOURS OF SPECIALIZED REQUIRED |  |
| MKTG-3413 | Consumer Behavior |
| MKTG-3713 | Sales Management and the Sales Process |
| MKTG-4513 | Marketing Research |
| MKTG-4613 | Marketing Management |
| 3 HOURS MARKETING COMMUNICATION |  |
| COMM-2113 | Writing for Media |
| 9 HOURS CHOSEN FROM |  |
| ARTS-1103 | Technology for Graphics |
| MKTG-3513 | E-Commerce and Online Marketing |
| MKTG-4313 | Promotional Strategies |
| MKTG-4993 | Internship in Marketing |

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS  <br> used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |



STATISTICS, 3 HOURS
used in major
MATH-2913 Statistical Methods
LIBERAL ARTS, 3 HOURS
3 hours as approved by the department
Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.B.A. DEGREE IN SPORTS MANAGEMENT - 64 HOURS

An OC graduate with a Bachelor of Business Administration degree will:

1. Gain competency in the foundational areas of business.
2. Understand the importance of ethics, values, morals, and social responsibility and relate them to the Christian worldview.
3. Possess critical thinking, analytical, and problem-solving skills.
4. Be able to work effectively in a global context.
5. Develop professional and persuasive communication skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 13 HOURS LOWER DIVISION |  |
| :--- | :--- |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| ECON-2213 | Microeconomic Principles |
|  |  |
| 6 HOURS MATH |  |
| MATH-1213 | College Algebra |
| MATH-2913 | Statistical Methods |
| 18 HOURS UPPER DIVISION |  |
| BUSA-3213 | Business Law |
| BUSA-3713 | Business Ethics |
| FINC-3313 | Principles of Finance |
| INTL-3313 | International Business |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |

3 HOURS CAPSTONE
MGMT-4613 Strategic Management
24 HOURS REQUIRED SPECIALIZED SPORTS MANAGEMENT
MKTG-3713 Sales Management and the Sales Process
SPMG-3313 Principles and Practices of Sports Administration
SPMG-3413 Managing Sports Organization
SPMG-3513 Sports in Society
SPMG-3613 Sports and Event Promotion
SPMG-4113 Legal Aspects of Sports
SPMG-4213 Facility Design and Event Planning
SPMG-4993 Internship in Sports Management

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II COMM-1213 Oral Communication

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS

| BIBL-4523 | Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS <br> POLS-2113 Introduction to American Government |  |
|  |  |
|  |  |

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

BUSINESS COMMUNICATION, 3 HOURS
used in major
COMM-3113 Business and Professional Communication

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

## LIBERAL ARTS, 3 HOURS

3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN SPORT, WELLNESS AND RECREATION, MINOR REQUIRED 42 HOURS

This degree is designed for students who are preparing for jobs in the sport, wellness and recreation professions.
An OC graduate with a Bachelor of Science degree in Sport, Wellness and Recreation will:

1. Demonstrate a thorough knowledge of the foundational principles of sport, wellness and recreation.
2. Understand the importance of ethics, values, and social responsibility in relation to a Christian worldview.
3. Possess critical thinking and problem-solving skills.
4. Work effectively with others in a team environment.
5. Demonstrate a thorough knowledge of the liberal arts.

This degree is not accredited by the ACBSP, but is accredited by HLC.
Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 12 HOURS FOUNDATION COURSES |  |
| :--- | :--- |
| SPWR-1113 | Introduction to Sport, Wellness, and Recreation |
| SPWR-3113 | Concepts of Kinesiology |
| SPWR-4113 | Organization and Administration of Sport, Wellness, and <br>  <br> Recreation <br> SPWR-4613 |
|  | Capstone Skills |
| 10 HOURS WELLNESS |  |

## 20 HOURS SPORT AND RECREATION <br> SPWR-2612 Sports Officiating <br> SPWR-2702 Sports Lab I <br> SPWR-2712 Sports Lab II <br> SPWR-2722 Sports Lab III <br> SPWR 3233 Theory of Coaching <br> SPWR-3293 Coaching Ethics and Sports Psychology <br> SPWR-4123 Recreational Leadership and Youth Sports <br> SPWR-4513 Recreation for the Disabled

A minor of at least 18 hours is REQUIRED in order to broaden the student's
interest

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

communcatoon, h huirs

| ENGL-1113 | English Composition I |
| :--- | :--- |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS <br> appropriate to major |  |
|  |  |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
|  | Testament |
| BIBL-2302 | Story of the New |
|  | Testament |

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

| CAPSTONE, |
| :--- |
| BIBL-4523 | | HOURS |
| :--- |
| Capstone: Christ and His |
| World |


| POLITICAL |
| :--- | :--- |

SCIENCE, 3 HOURS
POLS-2113
Introduction to
American Government

| ENGL-2213 | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
| MUSC-2013 | Music Appreciation | GEOG-2113 | Elements of Human |
| MUSC-3213 | Perspectives in World |  | Geography |
|  | Music | GEOG-2213 | World Regional Geography |
| SCIENCE, 6 HOURS |  | $\begin{aligned} & \text { HIST-2613 } \\ & \text { MISS- } 3513 \end{aligned}$ | The Modern Middle East World Religions |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  | MISS-3613 <br> MISS-3673 | Cultural Anthropology New Religious |
| BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I |  | MUSC-3213 | Movements Perspectives in World Music |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  | LIBERAL A outside majo | S, 3 HOURS <br> as approved by department |
| WESTERN <br> HIST-2923 | VILIZATION, 3 HOURS Perspectives in Western Civilization | *For more info study abroad page 25 . | mation on how to apply the rips to the core curriculum see |

## MINOR REQUIREMENTS - COLLEGE OF BUSINESS ADMINISTRATION

The purpose of a minor program is to enable students to expand their educational horizons by focusing study in a particular field outside their majors. Therefore, the College of Business Administration offers the minor programs described below.

## ACCOUNTING MINOR 19 HOURS

10 HOURS BUSINESS FOUNDATION

| ACCT-2113 | Accounting Principles I |
| :--- | :--- |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| FINC-3313 | Principles of Finance |
| 3 HOURS ACCOUNTING |  |
| ACCT-2213 | Accounting Principles II |
|  |  |
| 6 HOURS CHOSEN FROM |  |
| ACCT-3113 | Intermediate Accounting I |
| ACCT-3313 | Cost Accounting |
| ACCT-3413 | Income Taxation |
|  |  |
| FINANCE MINOR 19 | HOURS |
| 13 HOURS BUSINESS FOUNDATION |  |
| ACCT-2113 | Accounting Principles I |
| ACCT-2213 | Accounting Principles II |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| FINC-3313 | Principles of Finance |

6 HOURS CHOSEN FROM ANY FINANCE COURSE
GENERAL BUSINESS MINOR 19 HOURS
13 HOURS BUSINESS FOUNDATION
ACCT-2113 Accounting Principles I
BUSA-1211 Introduction to Business
ECON-2113 Macroeconomic Principles
MGMT-3113 Principles of Management
MKTG-3313 Principles of Marketing
6 UPPER DIVISION HOURS FROM ANY TWO BUSINESS DISCIPLINES

## INTERNATIONAL BUSINESS MINOR 19 HOURS

13 HOURS BUSINESS FOUNDATION

| ACCT-2113 | Accounting Principles I |
| :--- | :--- |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |
| 3 HOURS FINANCE  <br> INTL-4123  <br> 3 HOURS CHOSEN FROM  <br> INTL-3313  <br> INTL-4413 International Business <br> INTL-4513 International Management <br> INTL-4723 International Economics <br> INTL-4743 Global Marketing International Social Entrepreneurship |  |

MANAGEMENT MINOR 19 HOURS
13 HOURS BUSINESS FOUNDATION
ACCT-2113 Accounting Principles I
BUSA-1211 Introduction to Business
ECON-2113 Macroeconomic Principles
MGMT-3113 Principles of Management
MKTG-3313 Principles of Marketing

6 HOURS CHOSEN FROM
BUSA-3713 Business Ethics
INFO-3113 Principles of Electronic Business
MGMT-3213 Operations Management
MGMT-4313 Organizational Behavior
MGMT-4513 Human Resource Management
MARKETING MINOR 19 HOURS
13 HOURS BUSINESS FOUNDATION

| ACCT-2113 | Accounting Principles I |
| :--- | :--- |
| BUSA-1211 | Introduction to Business |
| ECON-2113 | Macroeconomic Principles |
| MGMT-3113 | Principles of Management |
| MKTG-3313 | Principles of Marketing |

6 HOURS MARKETING CHOSEN FROM
MKTG-3413 Consumer Behavior
MKTG-3513 Electronic Commerce and Online Marketing
MKTG-3713 Sales Management and the Sales Process
MKTG-4313 Promotional Strategies
SPORT, WELLNESS, AND RECREATION MINOR - 19 HOURS
14 HOURS REQUIRED
SPWR-1113 Introduction to Sport, Wellness, and Recreation
SPWR-2413 Care and Prevention of Athletic Injuries
SPWR-2612 Sports Officiating
SPWR-3113 Concepts of Kinesiology
SPWR-4113 Organization and Administration of Sport, Wellness, and Recreation

## 2 HOURS CHOSEN FROM

SPWR-2702 Sports Lab I
SPWR-2712 Sports Lab II
SPWR-2722 Sports Lab III
3 HOURS CHOSEN FROM
SPWR-3233 Theory of Coaching
SPWR-3293 Coaching Ethics and Sports Psychology

## GRADUATE SCHOOL OF BUSINESS

## AREAS OF STUDY

Accounting (ACCT)

## DUAL DEGREES OFFERED

M.Acc . Degree in Accounting
B.B.A.. Degree in Accounting

FACULTY
Mickey Cowan, M.B.A., C.P.A.
Professor of Accounting
Donald V. Drew, Ed.D.
Professor of Business
Kenneth Johnson, D.B.A.
Chair, Graduate School of Business
Associate Professor of Accounting
Jody Jones, Ed.D.
Professor of Business
Elaine Kelly, M.B.A., C.P.A.,
Associate Dean, College of Business Administration
Associate Professor of Accounting
Phil Lewis, Ed.D.,
Professor of Business
Kimberly Merritt, D.B.A.
Professor of Business
Kerianne Roper, D.B.A.
Professor of Business
Jeffery Simmons, D.B.A.
Dean, College of Business Administration
Professor of Business
Burton Smith, Ed.D.
Professor of Marketing
Daniel Sorensen, D.B.A., C.P.A.
Associate Professor of Accounting

## ADMISSIONS REQUIREMENTS

To be accepted into the dual bachelor/master degree programs, an applicant must:

- Be a current accounting major with a minimum 3.25 overall grade point average and a minimum 3.5 major grade point average and
- Apply prior to taking 90 hours in undergraduate studies (not including prior learning credits, AP credits etc.


## Student Financial Status

A student in a dual undergraduate/graduate degree program is considered a graduate student when he/she has completed 8 full time (12 hours) semesters, including full time summer semesters, of undergraduate studies. These full-time semesters may be completed at OC or another insitutiton. The change to graduate student status will impact a student's use of scholarships, financial aid, and tuition rates.

Note: For more information concerning graduate degrees, refer to the graduate catalog at www.oc.edu/registrar.

Once the full requirements of both degrees are met, the student will be awarded both a bachelor and master degree in their program

Note: It is possible for a student to change back to an undergraduate program at any time and receive a degree under that program if the requirements have been met.

## B.B.A. DEGREE IN ACCOUNTING \& M.ACC. DEGREE IN ACCOUNTING <br> 73 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.B.A., see page 39.
For program description and learning outcomes for the M.Acc. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree, Elective hours may be needed to reach 126 hours.

```
B.B.A. Degree Requirements:
13 HOURS LOWER DIVISION
ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
BUSA-1211 Introduction to Business
ECON-2113 Macroeconomic Principles
ECON-2213 Microeconomic Principles
6 HOURS MATH
MATH-1213 College Algebra
MATH-2913 Statistical Methods
21 HOURS UPPER DIVISION
BUSA-3213 Business Law
BUSA-3713 Business Ethics
COMM-3113 Business and Professional Communication
FINC-3313 Principles of Finance
INTL-3313 International Business
MGMT-3113 Principles of Management
MKTG-3313 Principles of Marketing
3 HOURS CAPSTONE
MGMT-4613 Strategic Management
21 HOURS SPECIALIZED
ACCT-3113 Intermediate Accounting I
ACCT-3213 Intermediate Accounting II
ACCT-3413 Income Taxation
ACCT-3513 Advanced Federal Taxation
ACCT-4113 Advanced Accounting I
ACCT-4413 Auditing
ACCT-4513 Financial Accounting Statement Analysis
```


## 6 HOURS SPECIALIZED CHOSEN FROM*

| ACCT-3713 | Accounting Information Systems* |
| :--- | :--- |
| ACCT-4213 | Advanced Accounting II* |
| ACCT-4313 | Advanced Cost Accounting* |
| ACCT-4423 | Ethics and Auditing Concepts* |
|  |  |
| 6 HOURS REQUIRED |  |
| ACCT-3313 | Cost Accounting |
| INFO-3613 | Management Information System |

## M.Acc. Degree Requirements:

## ACCOUNTING FOUNDATION STUDIES, 18 HOURS

ACCT-5113 Advanced Tax Accounting
ACCT-5123 Advanced Auditing and Professional Ethics
ACCT-5133 Advanced Financial Accounting
ACCT-5143 Topics in Accounting
ACCT-5153 Accounting Theory
ACCT-5163 Accounting Research and Quantitative Techniques
BUSINESS REQUIRED, 12 HOURS
BUSA-5203 Economic Issues
BUSA-5213 Legal and Regulatory Issues
FINC-5103 Financial Services
MGMT-5603 Ethics, Decision Making, and Communication
*Up to 3 hours of these undergraduate requirements should be satisfied by graduate accounting course work. Three undergraduate elective hours may be satisfied by accountingx graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

| BIBL-4523 | Capstone: Christ and His |
| :--- | :--- |
|  | World |


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  |


| AMERICAN HISTORY, 3 HOURS |  |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS

| BEHAVIORAL SCIENCE, 3 HOURS |
| :--- |
| PSYC-1113 |
| General PSychology I |


| BUSIISESS COMMUNICATION, 3 HOURS |
| :--- |
| used in major |
| COMM-3113 | | Business and Professional |
| :--- |
| Communication |

STATISTICS, 3 HOURS
used in major MATH-2913 Statistical Methods

LIBERAL ARTS, 3 HOURS
3 hours as approved by the department Communication, English, Fine Arts, Foreign Language, History, Math, Science
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## COLLEGE OF

## ENGINEERING \&

## COMPUTER SCIENCE

Department of Computer Science
Department of Electrical \& Computer Engineering
Department of Mathematics
Department of Mechanical Engineering
Graduate School of Engineering \& Computer Science

## DEPARTMENT OF COMPUTER SCIENCE

## AREAS OF STUDY

Computer Science (CMSC)
Mathematics (MATH)

## DEGREES OFFERED

B.S. Degree in Computer Science
B.S. Degree in Computer Science with Business
B.S. Degree in Computer Science with Cyber Security
B.S. Degree in Computer Science with Gaming and Animation

## GRADUATE SCHOOL OF ENGINEERING AND COMPUTER SCIENCE

M.S.C.S. Master of Science in Computer Science

MINORS
Computer Science
Software Engineering

## FACULTY

Curtis Coleman, Ph.D. (candidate), Visiting Professor of Computer Science
Andy Harbert, M.S., Department Chair of Computer Science, Assistant
Professor of Computer Science
Don Leftwich, M.A., Associate Professor of Mathematics and Computer Science
Robert Nix, Ph.D., Assistant Professor of Computer Science
David North, M.S., Associate Professor of Computer Science

## LOCATION

Prince Engineering Center
Herold Science Hall

## DEAN

Byron Newberry, Ph.D., Dean of the College of Engineering and Computer
Science, Professor of Mechanical Engineering

## DEAN'S OFFICE

Prince Engineering Center, Room 203

## B.S. DEGREE IN COMPUTER SCIENCE 77 HOURS

An OC graduate with a Bachelor of Science degree in Computer Science will:

1. Be able to demonstrate understanding of and ability to apply core Computer Science principles, knowledge, and skills to solve problems using computers.
2. Be able to apply a Christian worldview in the practice of Computer Science.
3. Be prepared for a career and/or vocation using Computer Science.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 24 HOURS LOWER DIVISION COURSES |  |
| :--- | :--- |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
| 21 HOURS UPPER DIVISION CoURSES |  |
| CMSC-3313 | Software Engineering III-Ethics |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |

12 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Information System Security
CMSC-4713 Artificial Intelligence
3 HOURS COMMUNICATION CHOSEN FROM
COMM-3113 Business and Professional Communication or
ENGL-3493 Technical Writing
17 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2913 Statistical Methods
MATH-3513 Linear Algebra

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| Msed in major  <br> MATH-2114 Calculus I with Analytical <br> Geometry  <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament |  |

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
used in major
MATH-2114
Geometry
EQUIRED BIBLE, 8 HOURS
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| AMERICAN | HISTORY, 3 HOURS |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |
|  |  |
| GREAT WORKS, 3 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMPUTER SCIENCE WITH BUSINESS <br> 81 HOURS

An OC graduate with a Bachelor of Science degree in Computer Science with Business will:

1. Be able to demonstrate understanding of and ability to apply core Computer Science principles, knowledge, and skills to solve problems using computers.
2. Be able to demonstrate understanding of and ability to apply accounting, finance, management, and marketing knowledge to solve problems in business, especially using computers.
3. Be able to apply a Christian worldview in the practice of Computer Science.
4. Be prepared for a career and/or vocation using Computer Science, especially in the business field.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language

## 21 HOURS UPPER DIVISION COURSES

CMSC-3313 Software Engineering III-Ethics
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages

## 9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM

CMSC-4103 Data Communications and Networking
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Information System Security
CMSC-4713 Artificial Intelligence

## 3 HOURS COMMUNICATION CHOSEN FROM

COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

## 6 HOURS MATHEMATICS

MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods
18 HOURS BUSINESS CHOSEN FROM
ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
ECON-2113 Macroeconomics
FINC-3113 Financial Management
INFO-3113 Principles of Electronic Business
INFO-3613 Management Information Systems
MGMT-3113 Principles of Management
MGMT-3213 Production/Operations Management
MKTG-3313 Principles of Marketing

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

used in major
MATH-2114 Calculus I with Analytical Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

| BIBL-2302 | Story of the New Testament |
| :---: | :---: |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |
| CAPSTONE, 3 HOURS |  |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |


| AMERICAN HISTORY, 3 HOURS |  | SCIENCE, 6 HOURS |
| :---: | :---: | :---: |
| HIST-1223 | Turning Points in U.S. History |  |
|  |  | PSYCHOLOGY, SOCIAL SCIENCES, FINE |
| GREAT WORKS, 3 HOURS |  | ARTS OR FOREIGN LANGUAGE, 3 HOURS |
| should include | literature | 3 hours from these departments: Fine |
| ARTS-2013 | Survey of Visual Culture | Arts, Family Science, French, German, |
| ARTS-2423 | History of Photography and Motion Pictures | History, Japanese, Music, Political Science, Psychology, or Spanish |
| COMM-2023 | History of Theater |  |
| ENGL-2213 | Perspectives in Literature | LIBERAL ARTS, 9 HOURS |
| MUSC-2013 | Music Appreciation | 9 hours from any Liberal Arts area |
| MUSC-3213 | Perspectives in World Music | *For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 . |

## B.S. DEGREE IN COMPUTER SCIENCE WITH CYBER SECURITY 84 HOURS

An OC graduate with a Bachelor of Science degree in Computer Science with Cyber Security will:

1. Be able to demonstrate understanding of and ability to apply core Computer Science principles, knowledge, and skills to solve problems using computers.
2. Be able to demonstrate understanding of and ability to apply gaming and animation knowledge and skills to solve problems in the computer gaming industry.
3. Be able to apply a Christian worldview in the practice of Computer Science.
4. Be prepared for a career and/or vocation using Computer Science, especially in the gaming and animation field.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION COURSES
CMSC-3313 Software Engineering III-Ethics
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Cryptography
CMSC-4673 Computer System Risk Management
CMSC-4683 Offensive Security and Penentration Testing
CMSC-4713 Artificial Intelligence

| 3 HOURS CHOSEN FROM |  |
| :--- | :--- |
| COMM-3113 | Business and Professional Communication |
| ENGL-3493 | Technical Writing |
| 6 HOURS MATHEMATICS |  |
| MATH-1623 Introduction to Discrete Mathematics <br> MATH-2913 Statistical Methods <br> 15 HOURS CYBER  <br> SECURITY  <br> CMSC-3633 Introduction to Cyber Security <br> CMSC-4103 Data Communication \& Networking <br> CMSC-4643 Network Security <br> CMSC-4653 Cloud Architecture and Security <br> CMSC-4663 Network Forensics. |  |

6 HOURS ELECTIVES
Any MATH 2000 level or above or upper division Computer Science not already taken

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 English Composition II <br> COMM-1213 Oral Communication <br>   <br> MATHEMATICS, 3 HOURS  <br> used in major  <br> MATH-2114 Calculus I with Analytical <br> Geometry  <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament |  |

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition ENGL-1213 English Composition II COMM-1213 Oral Communication
used in major
MATH-2114 Calculus I with Analytica

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-2202 Story of the Old Testament

BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMPUTER SCIENCE WITH GAMING AND ANIMATION 84 HOURS

An OC graduate with a Bachelor of Science degree in Computer Science with Gaming and Animation will:

1. Be able to demonstrate understanding of and ability to apply core Computer Science principles, knowledge, and skills to solve problems using computers.
2. Be able to demonstrate understanding of and ability to apply gaming and animation knowledge and skills to solve problems in the computer gaming industry.
3. Be able to apply a Christian worldview in the practice of Computer Science.
4. Be prepared for a career and/or vocation using Computer Science, especially in the gaming and animation field.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION COURSES
CMSC-3313 Software Engineering III-Ethics
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Information System Security
CMSC-4713 Artificial Intelligence

3 HOURS CHOSEN FROM
$\begin{array}{ll}\text { COMM-3113 } & \text { Business and Professional Communication } \\ \text { ENGL-3493 } & \text { Technical Writing }\end{array}$
6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics

MATH-2913 Statistical Methods
15 HOURS GAMING AND ANIMATION
ARTS-2133 Introduction to Game Technology
ARTS-2743 3D Modeling I
ARTS-3393 History of Gaming and Animation
ARTS-3453 Team Game Production I
CMSC-3203 Game Programming
6 HOURS CHOSEN FROM
ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3513 Linear Algebra
Any course from FINC, INFO, MGMT, or MKTG number 3000 or above
Any physics course
Any upper level computer science course not already used

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

## BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Momion Pictures COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music

## SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## DEPARTMENT OF

# ELECTRICAL \& COMPUTER ENGINEERING 

## AREAS OF STUDY

Computer Engineering (CENG)
Electrical Engineering (ELEC)
Engineering (ENGR)

## DEGREES OFFERED

B.S.C.E. Degree in Computer Engineering
B.S.C.E. Degree in Computer Engineering with Software Engineering Emphasis
B.S.E.E. Degree in Electrical Engineering
B.S.E.E. Degree in Electrical Engineering with Software Engineering Emphasis
GRADUATE SCHOOL OF ENGINEERING AND COMPUTER SCIENCE
M.S.E. Master of Science in Engineering

## MINORS

Engineering
FACULTY
Kenneth Bell, M.S., Assistant Professor of Electrical and Computer Engineering Jeffrey Bigelow, Ph.D., Department Chair of Electrical and

Computer Engineering , Professor of Electrical and Computer Engineering
Steve Maher, M.S., Associate Professor of Electrical and Computer Engineering
Pat Smith, M.S., Associate Professor of Electrical and Computer Engineering
David Waldo, Ph.D., Professor of Electrical and Computer Engineering
W. Joe Watson, M.S.E.E., P.E., Professor of Electrical and Computer Engineering

## LOCATION

Prince Engineering Center
Herold Science Hall

## DEAN

Byron Newberry, Ph.D., Dean of the College of Engineering and Computer
Science, Professor of Mechanical Engineering

## DEAN'S OFFICE

Prince Engineering Center, Room 203

## ACADEMIC POLICIES

## PROGRAM REQUIREMENTS

Beyond the common university requirements for all baccalaureate degrees, the following criteria must be met to graduate with a degree in engineering:

- To declare computer or electrical engineering as a major, you must either have a math sub score on the ACT of at least 23 (or equivalent) or have successfully completed MATH-1213 or MATH-1614 with a "C" or better.
- You must complete all prerequisites to ENGR, CENG, ELEC, and MECH courses with a grade of " $C$ " or better.
- You must maintain a 2.0 minimum major GPA (i.e. the GPA computed excluding core curriculum courses)
- You must complete all departmental assessments.


## TRANSFERRING POLICY

OC Engineering welcomes transfer students and will work on an individual basis to match the maximum amount of previous course work with OC graduation requirements without compromising the strength and value of an OC Engineering degree. To assure that transfer credits meet departmental objectives and engineering accreditation standards, the Department of Electrical and Computer Engineering uses the following guidelines and process:

- Students transferring into OC Engineering should submit their official transcripts to the Office of the Registrar for evaluation at least six weeks prior to the beginning of their first semester in OC Engineering.
- All transfer credit is subject to individual evaluation at the discretion of the
departments.
- The departments will generally allow appropriate mathematics and science courses to count towards the required 32 hours of mathematics and science, even if there is not a one-to-one correspondence between courses. Likewise, the departments will generally allow appropriate engineering and computer science courses to count towards the total number of required hours in engineering and computer science.
- Mathematics, science, computer science, and lower level (1000 and $2000-$ level) engineering science course credits must come from regionally accredited colleges and universities offering courses designed to provide background for baccalaureate degrees.
- Upper-division ( 3000 and $4000-$ level) engineering credits must come from institutions offering ABET-accredited engineering programs.
- Courses completed at international colleges and universities where accreditation is not available will be evaluated on an individual basis.
- Courses from within a technology curriculum do not transfer.
- Transfer credits with grades of less than a " C " will not count toward the engineering degree requirements.


## ADMITTANCE INTO ELECTRICAL OR COMPUTER ENGINEERING STUDIES

The upper-division computer engineering and electrical engineering courses (ELEC and CENG courses) at OC require a mastery of foundational material contained in the first two years of the degree plans. Therefore, the Department of Electrical and Computer Engineering has set forth the following policies for Admittance into Electrical and Computer Engineering studies:

- To be admitted, you must be currently enrolled in or have attained a grade of "C" or better in the required math, science, lower-division computer science and lower-division engineering science coursework for your program.
- The department will communicate to those who meet the requirement before the pre-enrollment period of each spring semester (typically while in ENGR-2614 Electrical Circuit Analysis).
- Admittance is conditional upon successively completing the in-progress courses with a grade of " $C$ " or better.
- Once admitted, you may take any ELEC or CENG course for which you have met the pre-requisites with a grade of " $C$ " or better.

Those that do not meet admittance requirements may petition the department chair and advisor to be allowed to take CENG or ELEC courses. In these cases, the ECE faculty will decide upon a remediation plan for the following year to allow the student to take a subset of CENG and ELEC courses while fulfilling the missing requirements. The student should note that failure to meet admittance requirements during the first two years will require additional time and/or hours to complete the EE or CE degree. Those that complete the requirements at a later time may petition the department chair and advisor to be reconsidered.

## master of science in engineering

The Graduate School of Engineering and Computer Science offers a Master of Science in Engineering (M.S.E.) degree with specializations in computer engineering, electrical engineering, engineering management, mechanical engineering, and software engineering. Undergraduates who are considering the M.S.E. should attain an undergraduate engineering degree from an ABET-accredited institution. Some consideration will be given to students with backgrounds from computer science, physics, or related fields. For more information about the Graduate School of Engineering and Computer Science, email graduateprograms@oc.edu.

## B.S.C.E. DEGREE IN COMPUTER ENGINEERING <br> 94 HOURS

The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
The Department of Electrical and Computer Engineering considers its primary constituents to be threefold: industry, students who value an engineering education at a Christian university, and parents of these students. Working with these constituents, we have set the following Program Educational Objectives.

OC graduates with a Computer or Electrical Engineering degree will use the talents God has given them to make a difference through:

1. Enjoying a successful career characterized by contributing effectively and adding value to the engineering process, functioning well in the workplace as an integral member of a team, and keeping technically current and adaptive to changes in the workplace.
2. Internalizing a personal faith in God that is exhibited by consistent ethical behavior based on Christian principles, an exemplary work ethic consistent with their Christian worldview, and a stable life that balances career, family, church, and community.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS MATHEMATICS

| MATH-2114 | Calculus I with Analytical Geometry |
| :--- | :--- |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential Equations |
| ENGR-1113 | Engineering Mathematics |
| ENGR-2113 | ECE Mathematics I |
| ENGR-2123 | ECE Mathematics II |
| 8 HOURS SCIENCE |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |

29 HOURS ENGINEERING AND COMPUTER SCIENCE
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 20 HOURS COMPUTER ENGINEERING

CENG-3113 Data Communications
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
CENG-4223 Embedded Systems Design
CENG-4732 Systems Design I
CENG-4743 Systems Design II
CENG-4753 Systems Design III
7 HOURS ELECTRICAL ENGINEERING

| ELEC-3313 | Electronic Devices |
| :--- | :--- |
| ELEC-3504 | Signals and Systems |

6 HOURS COMPUTER ENGINEERING ELECTIVES
CENG-4113 Software and Network Engineering
CENG-4233 Advanced Computer Architecture
CENG-4303 HDL Design of Microprocessors

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I
REQUIRED BIBLE, }8\mathrm{ HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```



Japanese, Music, Political Science,
Psychology, or Spanish
LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S.C.E. DEGREE IN COMPUTER ENGINEERING WITH SOFTWARE ENGINEERING EMPHASIS - 94 HOURS

The Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
The Department of Electrical and Computer Engineering considers its primary constituents to be threefold: industry, students who value an engineering education at a Christian university, and parents of these students. Working with these constituents, we have set the following Program Educational Objectives.

OC graduates with a Computer or Electrical Engineering degree will use the talents God has given them to make a difference through:

1. Enjoying a successful career characterized by contributing effectively and adding value to the engineering process, functioning well in the workplace as an integral member of a team, and keeping technically current and adaptive to changes in the workplace.
2. Internalizing a personal faith in God that is exhibited by consistent ethical behavior based on Christian principles, an exemplary work ethic consistent with their Christian worldview, and a stable life that balances career, family, church, and community.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS MATHEMATICS

MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3013 Differential Equations
ENGR-1113 Engineering Mathematics
ENGR-2113 ECE Mathematics I
ENGR-2123 ECE Mathematics II

## 8 HOURS SCIENCE

| PHYS-2514 | Physics I |
| :--- | :--- |
| PHYS-2614 | Physics II |

29 HOURS ENGINEERING AND COMPUTER SCIENCE
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 23 HOURS COMPUTER ENGINEERING

CENG-3113 Data Communications
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
CENG-4113 Software and Network Engineering
CENG-4223 Embedded Systems Design
CENG-4732 Systems Design I
CENG-4743 Systems Design II
CENG-4753 Systems Design III
10 HOURS ELECTRICAL ENGINEERING
ELEC-3504 Signals and Systems
ELEC-3523 Digital Signal Processing
ELEC-4523 Software Engineering of Real-Time Systems

UNIVERSITY CORE CURRICULUM:
B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, }6\mathrm{ HOURS
ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I
REQUIRED BIBLE, }8\mathrm{ HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```



| ARTS-2013 | Survey of Visual Culture |
| :---: | :---: |
| ARTS-2423 | History of Photography and |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
|  |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |
| PSYCHOLOG ARTS OR FO 3 hours from Family Scienc | Y, SOCIAL SCIENCES, FINE REIGN LANGUAGE, 3 HOURS he departments: Fine Arts, French German Histor |

Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
Can be used in major
9 hours from MATH and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S.E.E. DEGREE IN ELECTRICAL ENGINEERING <br> 94 HOURS

The Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
Program Educational Objectives:
The Department of Electrical and Computer Engineering considers its primary constituents to be threefold: industry, students who value an engineering education at a Christian university, and parents of these students. Working with these constituents, we have set the following Program Educational Objectives.

OC graduates with an Electrical or Computer Engineering degree will use the talents God has given them to make a difference through:

1. Enjoying a successful career characterized by contributing effectively and adding value to the engineering process, functioning well in the workplace as an integral member of a team, and keeping technically current and adaptive to changes in the workplace.
2. Internalizing a personal faith in God that is exhibited by consistent ethical behavior based on Christian principles, an exemplary work ethic consistent with their Christian worldview, and a stable life that balances career, family, church, and community.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS MATHEMATICS

MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3013 Differential Equations
ENGR-1113 Engineering Mathematics
ENGR-2113 ECE Mathematics I
ENGR-2123 ECE Mathematics II

## 8 HOURS SCIENCE

PHYS-2514 Physics I
PHYS-2614 Physics II

## 20 HOURS ENGINEERING AND COMPUTER SCIENCE

CMSC-1113 Programming I
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 3 HOURS ELECTIVE ENGINEERING AND COMPUTER SCIENCE

CMSC-1123 Programming II
ENGR-2433 Thermodynamics

27 HOURS ELECTRICAL ENGINEERING
ELEC-3303 Analog Electronics
ELEC-3313 Electronic Devices
ELEC-3504 Signals and Systems
ELEC-3523 Digital Signal Processing
ELEC-3613 Electromagnetic Fields
ELEC-4113 Communications Systems
ELEC-4732 Systems Design I
ELEC-4743 Systems Design II
ELEC-4753 Systems Design III
6 HOURS COMPUTER ENGINEERING REQUIRED
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
6 HOURS ELECTRICAL ENGINEERING ELECTIVES
ELEC-4323 Semiconductor Devices
ELEC-4423 Control Systems
ELEC-4523 Software Engineering of Real-Time Systems

## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 6 HOURS

ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

| BIBLE ELECTIVE, 5 HOURS <br> 5 hours of Bible courses, except Missions Experience |  |
| :---: | :---: |
|  |  |
| CAPSTONE, 3 HOURS |  |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 Turning Points in U.S. History |  |
| GREAT WOR | KS, 3 HOURS |


| ARTS-2013 | Survey of Visual Culture |
| :--- | :--- |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |
|  |  |
| PSYCHOLOGY, SOCIAL SCIENCES, FINE |  |
| ARTS OR FOREIGN LANGUAGE |  |
| 3 hours from the departments: Fine Arts, |  |
| Family Science, French, German, History, |  |

Japanese, Music, Political Science,
Psychology, or Spanish
LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S.E.E. DEGREE IN ELECTRICAL ENGINEERING WITH SOFTWARE ENGINEERING EMPHASIS - 94 HOURS

The Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
The Department of Electrical and Computer Engineering considers its primary constituents to be threefold: industry, students who value an engineering education at a Christian university, and parents of these students. Working with these constituents, we have set the following Program Educational Objectives.

OC graduates with an Electrical or Computer Engineering degree will use the talents God has given them to make a difference through:

1. Enjoying a successful career characterized by contributing effectively and adding value to the engineering process, functioning well in the workplace as an integral member of a team, and keeping technically current and adaptive to changes in the workplace.
2. Internalizing a personal faith in God that is exhibited by consistent ethical behavior based on Christian principles, an exemplary work ethic consistent with their Christian worldview, and a stable life that balances career, family, church, and community.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 24 HOURS MATHEMATICS |  | 3 HOURS ELECTIVE ENGINEERING AND COMPUTER SCIENCE |  |
| :---: | :---: | :---: | :---: |
| MATH-2114 | Calculus I with Analytical Geometry | CMSC-1123 | Programming II |
| MATH-2214 | Calculus II with Analytical Geometry | ENGR-2433 | Thermodynamics |
| MATH-2314 | Calculus III |  |  |
| MATH-3013 | Differential Equations | 30 HOURS EL | AL ENGINEERING |
| ENGR-1113 | Engineering Mathematics | ELEC-3303 | Analog Electronics |
| ENGR-2113 | ECE Mathematics I | ELEC-3313 | Electronic Devices |
| ENGR-2123 | ECE Mathematics II | ELEC-3504 | Signals and Systems |
|  |  | ELEC-3523 | Digital Signal Processing |
| 8 HOURS SCIENCE |  | ELEC-3613 | Electromagnetic Fields |
| PHYS-2514 | Physics I | ELEC-4113 | Communications Systems |
| PHYS-2614 | Physics II | ELEC-4523 | Software Engineering of Real-Time Systems |
|  |  | ELEC-4732 | Systems Design I |
| 20 HOURS ENGINEERING AND COMPUTER SCIENCE |  | ELEC-4743 | Systems Design II |
| CMSC-1113 | Programming I | ELEC-4753 | Systems Design III |
| ENGR-1111 | Introduction to Engineering |  |  |
| ENGR-1122 | Engineering Computing | 9 HOURS CO | ENGINEERING |
| ENGR-1242 | Engineering Fundamentals | CENG-3113 | Data Communications |
| ENGR-2544 | Introduction to Digital Systems | CENG-3203 | Intro to Microprocessors |
| ENGR-2614 | Electrical Circuit Analysis | CENG-4113 | Software and Network Engineering |
| ENGR-2700 | Christian Engineer Seminar |  |  |
| ENGR-3213 | Engineering Economics |  |  |
| ENGR-4701 | Senior Engineering Seminar |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```


## COMMUNICATION, 6 HOUR

```
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus
ReQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Mathew
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOUR
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
used in major
PHYS-2514 Physics
PHYS-2614 Physics I

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

## IBERAL ARTS, 9 HOUR

used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## DEPARTMENT OF MATHEMATICS

## AREAS OF STUDY

Mathematics (MATH)
DEGREES OFFERED
B.S. Degree in Mathematics
B.S. Degree in Mathematics/Computer Science
B.S.IB.B.A. Degrees in Mathematics and Finance
B.S.E. Degree in Mathematics Education

MINORS
Mathematics

FACULTY
Jennifer Bryan, Ph.D., Department Chair of Mathematics, Professor of Mathematics
Paul Howard, Ph.D., Professor of Mathematics
Craig Johnson, Ph.D., Professor of Mathematics
Don Leftwich, M.A., Associate Professor of Mathematics and Computer Science
Monica Muza, M.S., Instructor of Mathematics
Lindsay Prugh, Ph.D., Assistant Professor of Mathematics
LOCATION
Prince Engineering Center
Herold Science Hall

## DEAN

Byron Newberry, Ph.D., Dean of the College of Engineering and Computer Science, Professor of Mechanical Engineering

## DEAN'S OFFICE

Prince Engineering Center, Room 203

## B.S. DEGREE IN MATHEMATICS 52 HOURS, MINOR REQUIRED

An OC graduate with a Bachelor of Science degree in Mathematics will:

1. Demonstrate a thorough knowledge of the foundational principles of analysis, algebra, and geometry and be able to use standard problem-solving methods in a variety of contexts.
2. Exhibit the ability to adapt to new environments and advances in technology, apply research methodologies, and to learn independently.
3. Work effectively with others, including the ability to describe mathematical problems, solutions, proofs, and logical arguments in a clear, concise manner using both written and oral communication.
4. Demonstrate a thorough knowledge of the liberal arts, living as a person of integrity with an ability to think, act, and communicate from a Christian worldview in all areas of life.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 15 HOURS LOWER DIVISION MATHEMATICS

| MATH-2114 | Calculus I with Analytical Geometry |
| :--- | :--- |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-2913 | Statistical Methods |

16 HOURS UPPER DIVISION MATHEMATICS
MATH-3013 Differential Equations
MATH-3313 Modern Algebra I
MATH-3513 Linear Algebra
MATH-3813 Modern Geometry
MATH-4113 Probability and Statistics I
MATH-4811 Seminar in Mathematics

## 12 HOURS ANY 3000/4000 MATH NOT USED ABOVE

## 9 HOURS ELECTIVES CHOSE FROM:

Mathematics courses numbered 1213 or higher
Any computer science course
Physics courses numbered 2514 or higher

Students interested in Actuarial Science may complete a mathematics major with a minor in finance with suggested courses or a Finance Major with a minor in mathematics with suggested courses. Talk to your academic advisor for a list of suggested courses.

Mathematics major with a concentration in Actuarial Science
For the current mathematics major, this would only require a Finance minor.
FINANCE MINOR
Required Courses
ACCT 2113-Accounting Principles I
ACCT 2213-Accounting Principles II
BUSA 1211-Introduction to Business
ECON 2113-Macroeconomic Principles
FINC 3313-Principles of Finance
Suggested elective courses:
FINC 4113-Advanced Financial Management
FINC 3513-Money and Banking

## UNIVERSITY CORE CURRICULUM:

## B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS<br>ENGL-1113 English Composition ENGL-1213 English Composition II<br>COMM-1213 Oral Communication<br>\section*{MATHEMATICS, 3 HOURS}<br>used in major<br>MATH-2114 Calculus I with Analytical<br>Geometry<br>\section*{REQUIRED BIBLE, 8 HOURS}<br>BIBL-1212 Life of Christ: Matthew<br>BIBL-1312 Life of the Early Church: Acts<br>BIBL-2202 Story of the Old Testament

BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

| AMERICAN HISTORY, 3 HOURS |  |
| :--- | :--- |
| HIST-1223 Turning Points in U.S. History |  |
| GREAT WORKS, 3 HOURS <br> sRould include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, Arts, Family Science, French, German,
History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN MATHEMATICS/COMPUTER SCIENCE <br> 72 HOURS

An OC graduate with a Bachelor of Science degree in Mathematics/Computer Science will:

1. Demonstrate a thorough knowledge of the foundational principles of analysis, algebra, and geometry and be able to use standard problem-solving methods in a variety of contexts.
2. Recognize the ethical and appropriate use of technology and apply the theories and principles of Computer Science to effectively solve problems in a timely and cost-effective manner.
3. Exhibit the ability to adapt to new environments, apply research methodologies, and learn independently.
4. Work effectively in a team environment, including the ability to describe complex ideas and logical arguments in a clear, concise manner using both written and oral communication.
5. Demonstrate a thorough knowledge of the liberal arts, living as a person of integrity with an ability to think, act, and communicate from a Christian worldview in all areas of life.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 18 HOURS LOWER DIVISION MATHEMATICS | 21 HOURS REQUIRED |
| :---: | :---: |
| MATH-1623 Introduction to Discrete Mathematics | CMSC-1113 Programming I |
| MATH-2114 Calculus I with Analytical Geometry | CMSC-1123 Programming II |
| MATH-2214 Calculus II with Analytical Geometry | CMSC-1313 Software Engineering I-Introduction |
| MATH-2314 Calculus III | CMSC-2133 Object Oriented Programming |
| MATH-2913 Statistical Methods | CMSC-2233 Data Structures and Algorithm Analysis |
|  | CMSC-2413 Introduction to Assembly Language |
| 9 HOURS REQUIRED | CMSC-3443 Computer Organization and Architecture |
| MATH-3013 Differential Equations |  |
| MATH-3513 Linear Algebra | 6 HOURS ANY 3000/4000 COMPUTER SCIENCE NOT USED ABOVE |
| MATH-4113 Probability and Statistics I |  |
|  | 5 HOURS SELECTED FROM ANY COMPUTER SCIENCE NOT USED ABOVE |
| 12 HOURS ELECTIVE NUMBERED 3000 OR ABOVE, INCLUDING TWO OF THE |  |
| FOLLOWING | 1 HOUR COMPUTER SCIENCE OR MATHEMATICS SEMINAR |
| MATH-3113 Number Theory | CMSC-4811 Computer Science Seminar |
| MATH-3313 Modern Algebra I | MATH-4811 Mathematics Seminar |
| MATH-3413 Modern Algebra II |  |
| MATH-3813 Modern Geometry |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

used in major
MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS |
| :--- | :--- |
| BIBL-4523 $\quad$Capstone: Christ and His <br> World |
| POLITICAL SCIENCE, 3 HOURS  <br> POLS-2113 Introduction to <br> American Government  |


| AMERICAN HISTORY, 3 HOURS |  |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |
|  |  |
| GREAT WORKS, 3 HOURS <br> should include literature |  |
| ARTS-2013 Survey of Visual Culture <br> ARTS-2423 History of Photography and <br>  Motion Pictures <br> COMM-2023 History of Theater <br> ENGL-2213 Perspectives in Literature <br> MUSC-2013 Music Appreciation <br> MUSC-3213 Perspectives in World Music <br> SCIENCE, 6 HOURS  |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, Arts, Family Science, French, German,
History, Japanese, Music, Political Science Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN MATHEMATICS AND B.B.A. DEGREE IN FINANCE 116 HOURS

For program description and learning outcomes for the B.B.A. degree in Finance, see page 41.
For program description and learning outcomes for the B.S. degree in Mathematics, see page 71.
Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 15 HOURS LOWER DIVISION MATHEMATICS |  | COMM-3113 | Business and Professional Communication |
| :---: | :---: | :---: | :---: |
| MATH-2114 | Calculus I with Analytical Geometry | FINC-3313 | Principles of Finance |
| MATH-2214 | Calculus II with Analytical Geometry | INTL-3313 | International Business |
| MATH-2314 | Calculus III | MGMT-3113 | Principles of Management |
| MATH-2913 | Statistical Methods* | MKTG-3313 | Principles of Marketing |
| 16 HOURS UPPER DIVISION MATHEMATICS |  | 3 HOURS CAPSTONE |  |
| MATH-3013 | Differential Equations | MGMT-4613 | Strategic Management |
| MATH-3313 | Modern Algebra I |  |  |
| MATH-3513 | Linear Algebra | 9 HOURS SPE | D COURSES |
| MATH-3813 | Modern Geometry | ACCT-4513 | Financial Accounting Statement Analysis |
| MATH-4113 | Probability and Statistics I* | FINC-4113 | Advanced Financial Management |
| MATH-4811 | Seminar in Mathematics | FINC-4313 | Financial Markets and Institutions |
| 12 HOURS ANY 3000/4000 MATH NOT USED ABOVE |  | 12 HOURS SPECIALIZED FINANCE COURSES CHOSEN FROM |  |
|  |  | FINC-3513 | Money and Banking |
| 9 HOURS ELECTIVES CHOSE FROM: |  | FINC-3613 | Investment Analysis |
| Mathematics courses numbered 1213 or higher |  | FINC-3813 | Personal Finance |
| Any computer science course |  | FINC-4123 | International Finance |
| Physics courses numbered 2514 or higher |  | FINC-4513 | Advanced Topics in Finance |
| B.B.A. Degree in Finance Requirements: |  | FINC-4713 | Principles of Insurance |
|  |  | 3 HOURS CHOSEN FROM |  |
| 13 HOURS LOWER DIVISION |  | ACCT-3113 | Intermediate Accounting I |
| ACCT-2113 | Accounting Principles I | ACCT-3413 | Income Taxation |
| ACCT-2213 | Accounting Principles II | MATH-4113 | Probability and Statistics $1^{*}$ |
| BUSA-1211 | Introduction to Business |  |  |
| ECON-2113 | Macroeconomic Principles | 6 HOURS BUSINESS |  |
| ECON-2213 | Microeconomic Principles | ACCT-3313 | Cost Accounting I |
|  |  | INFO-3613 | Management Information Systems |
| 9 HOURS MATH |  |  |  |
| MATH-1213 | College Algebra* | Students interested in actuarial science may complete a mathematics major with a minor in finance with suggested courses or a finance major with a minor in mathematics with suggested courses. Talk to your academic advisor for a list of suggested courses. |  |
| MATH-2113 | Business Calculus* |  |  |
| MATH-2913 | Statistics Methods* |  |  |
| 21 HOURS UPPER DIVISION |  |  |  |
| BUSA-3213 | Business Law | *These courses may be used in both majors. |  |
| BUSA-3713 | Business Ethics |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S. \& B.B.A. CORE - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major  <br> MATH-2114 Calculus I with Analytical <br> Geometry  <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I ENGL-1213 English Composition II COMM-1213 Oral Communication

MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
Story of the Old Testamen
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

## POLITICAL SCIENCE, 3 HOURS

POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
PSYCHOLOGY, 3 HOURS
PSYC-1113 General Psychology I

## BUSINESS COMMUNICATION, 3 HOURS

used in major
COMM-3113 Business and Professional
Communication
STATISTICS, 3 HOURS
used in major
MATH-2913 Statistical Methods

## B.S.E. DEGREE IN MATHEMATICS EDUCATION <br> 76 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

## An OC graduate with a Bachelor of Science in Education degree in Mathematics will:

1. Demonstrate a thorough knowledge of the foundational principles of analysis, algebra, and geometry and be able to use standard problem-solving methods in a variety of contexts.
2. Exhibit the ability to adapt to new environments and advances in technology, apply research methodologies, and learn independently.
3. Work effectively with others, including the ability to describe mathematical problems, solutions, proofs and logical arguments in a clear, concise manner using both written and oral communication.
4. Possess a working knowledge of sound and current pedagogical techniques for the teaching of mathematics at the secondary level.
5. Demonstrate a thorough knowledge of the liberal arts, living as a person of integrity with an ability to think, act, and communicate from a Christian worldview in all areas of life.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 34 HOURS REQUIRED

MATH-1623 Discrete Mathematics
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-2913 Statistical Methods
MATH-3123 Mathematical Modeling and Strategies for Secondary Teachers
MATH-3313 Modern Algebra I
MATH-3513 Linear Algebra
MATH-3813 Modern Geometry
MATH-4113 Probability and Statistics I
MATH-4811 Mathematics Seminar
3 HOURS CHOSEN FROM ANY 3000/4000 LEVEL MATHEMATICS COURSE
3 HOURS REQUIRED
CMSC-1113 Programming I

## 3 HOURS ELECTIVES CHOSEN FROM

## 3 HOURS ELECTIVES

Any other computer science course or any 3000-4000 level mathematics course not used in the major

LICENSURE: MATHEMATICS - GRADES 6-12

## PROFESSIONAL EDUCATION

## 25 SEMESTER HOURS EDUCATION

EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations and Behavior Management
EDUC-4131 Applied Instructional and Assessment Strategies
EDUC-4132 Critical Issues in Education
EDUC-4718 Student Teaching in the Secondary Schools
5 HOURS OTHER COURSES
EDUC-4112 Literacy in the Secondary Content Areas
PSYC-3523 Developmental Psychology
3 HOURS METHODS COURSE
EDUC-4463 Methods of Teaching Mathematics in Secondary
FOREIGN LANGUAGE COMPETENCY
Choose one:
High School Foreign Language - 2 years of same language with a grade of " C " or better
University credit - 3 hours foreign language or American Sign Language with a grade of " $C$ " or better.

## UNIVERSITY CORE CURRICULUM: <br> B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

used in major
MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
DEVELOPMENTAL PSYCH, 3 HOURS
used in major
PSYC-3523 Developmental Psychology
LIBERAL ARTS, 6 HOURS
6 hours from any Liberal Arts area, other than current major

## DEPARTMENT OF

## AREAS OF STUDY

Engineering (ENGR)
Mechanical Engineering (MECH)

## DEGREES OFFERED

B.S.M.E. Degree in Mechanical Engineering

## GRADUATE SCHOOL OF ENGINEERING

M.S.E. Master of Science in Engineering

## MINOR

Engineering Minor

## FACULTY

Bradley J. Buxton, M.S., Assistant Professor of Mechanical Engineering
S. David Cassel, Ph.D., P.E., Professor of Mechanical Engineering

Byron Newberry, Ph.D., Dean of the College of Engineering and Computer
Science, Professor of Mechanical Engineering
Kevin Plumlee, Ph.D., Department Chair of Mechanical
Engineering, Assistant Professor of Mechanical Engineering
William Ryan, Ph.D., P.E., Professor of Engineering Sciences
Paul W. (Wayne) Whaley, Ph.D., P.E., Professor of Mechanical Engineering
Debra Wood, M.S.E., Assistant Professor of Mechanical Engineering

## LOCATION

Prince Engineering Center
Herold Science Hall

## DEAN

Byron Newberry, Ph.D., Dean of the College of Engineering and Computer Science, Professor of Mechanical Engineering

## DEAN'S OFFICE

Prince Engineering Center, Room 203

## PROGRAM REQUIREMENTS

Beyond the common university requirements for all baccalaureate degrees, the following criteria must be met to graduate with a degree in engineering:

- To declare a mechanical or pre-engineering major and start engineering coursework, you must either have a math sub score on the ACT of at least 23 (or equivalent) or have successfully completed MATH-1614 with a "C" or better.
- You must maintain a 2.0 minimum major GPA (i.e. the GPA computed excluding core curriculum courses).
- You must complete all departmental assessments. Mechanical Engineering students must sit for the Fundamentals of Engineering exam prior to graduating.


## POLICY FOR STUDENTS TRANSFERRING INTO ENGINEERING PROGRAMS

OC Engineering welcomes transfer students and will work on an individual basis to match the maximum amount of previous course work with OC graduation requirements without compromising the strength and value of an OC Engineering degree. To assure that transfer credits meet departmental objectives and engineering accreditation standards, the Department of Mechanical Engineering uses the following guidelines and process:

- Students transferring into OC Engineering should submit their official transcripts to the Office of the Registrar for evaluation at least six weeks prior to the beginning of their first semester in OC Engineering.
- All transfer credit is subject to individual evaluation at the discretion of the departments.
- The departments will generally allow appropriate mathematics and science courses to count towards the required 32 hours of mathematics and science, even if there is not a one-to-one correspondence between courses. Likewise, the departments will generally allow appropriate engineering and computer science courses to count toward the total number of required hours in engineering and computer science.
- Mathematics, science, computer science, and lower level (1000 and 2000 -level) engineering science course credits must come from regionally accredited colleges and universities offering courses designed to provide background for baccalaureate degrees.
- Upper-division ( 3000 and 4000 -level) engineering credits must come from institutions offering ABET-accredited engineering programs.
- Courses completed at international colleges and universities where accreditation is not available will be evaluated on an individual basis.
- Courses from within a technology curriculum do not transfer.
- Transfer credits with grades of less than a "C" will not count toward the engineering degree requirements.


## MASTER OF SCIENCE IN ENGINEERING

The Graduate School of Engineering and Computer Science offers a Master of Science in Engineering (MSE) degree with specializations in computer engineering, electrical engineering, engineering management, mechanical engineering, and software engineering.

Undergraduates who are considering the MSE should attain an undergraduate engineering degree from an ABET-accredited institution. Some consideration will be given to students with backgrounds from computer science, physics, or related fields.

For more information regarding studies in the Graduate School of Engineering and Computer Science, email graduateprograms@oc.edu.

## B.S.M.E. DEGREE IN MECHANICAL ENGINEERING <br> 94 HOURS

The Mechanical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
An OC graduate with a Bachelor of Science degree in Mechanical Engineering will:

1. Adapt and grow in both technical and professional excellence throughout their career, exhibiting continuous learning and advancement.
2. Earn increasing levels of leadership and technical responsibility in the workplace, exhibiting the highest standards of ethical and professional integrity.
3. Embody the Christian worldview and pursue a balanced life of scholarship, leadership, and service.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 21 HOURS MATHEMATICS

| ENGR-1113 | Engineering Mathematics |
| :--- | :--- |
| ENGR-3023 | Engineering Probability \& Statistics |
| MATH-2114 | Calculus I with Analytical Geometry |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential Equations |
|  |  |
| 11 HOURS SCIENCE |  |
| CHEM-1313 | General Chemistry for Engineers |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |

## 2 HOURS PROGRAMMING REQUIRED

CMSC-1113 Programming I
or
ENGR-1132 Procedural Programming

## 21 HOURS ENGINEERING SCIENCE

ENGR-1252 Introduction to Solid Modeling
ENGR-2313 Statics
ENGR-2433 Thermodynamics I
ENGR-2523 Dynamics
ENGR-2533 Strength of Materials
ENGR-2623 ME Instrumentation
ENGR-3213 Engineering Economics
ENGR-3311 Experimental Mechanics

| 33 HOURS MECHANICAL ENGINEERING |  |
| :--- | :--- |
| MECH-3403 | Engineering Materials |
| MECC-3443 | Fluid Mechanics |
| MECH-3453 | Thermodynamics II |
| MECH-3613 | Manufacturing Processes |
| MECH-3813 | Mechatronics |
| MECH-4133 | Dynamic Systems and Controls |
| MECH-4213 | Machine Design |
| MECH-4243 | Heat Transfer |
| MECH-4311 | Thermal-Fluids Laboratory |
| MECH-4732 | Systems Design I |
| MECH-4743 | Systems Design II |
| MECH-4753 | Systems Design III |

6 HOURS TECHNICAL ELECTIVES CHOSEN FROM
MECH-4113 Partial Differential Equations
MECH-4143 Finite Difference Methods
MECH-4313 Aerodynamic Design
MECH-4523 Finite Element Analysis
MECH-4623 Advanced Engineering Materials
Note: Certain upper-division electrical engineering courses may be substituted for the MECH electives with the permission of the instructor and the student's advisor.

## UNIVERSITY CORE CURRICULUM: <br> B.S.M.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 6 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| Systems used in major |  |
| MECH-4753 | Systems Design III |
| SPEECH, 3 HOURS |  |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major |  |
| MATH-2114 | Calculus I with Analytical |
| Geometry |  |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |

COMMUNICATION, 6 HOURS
Systems used in maior
MECH-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
AATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts

| BIBL-2202 | Story of the Old Testament |
| :--- | :--- |
| BIBL-2302 | Story of the New Testament |

BIBLE ELECTIVE, 5 HOURS
Take 5 hours of Bible courses, except
Missions Experience

| AMERICAN | HISTORY, 3 HOURS |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |
|  |  |
| GREAT WORKS, 3 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |

PHYS-2514 Physics I
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE
Take 3 hours from the departments: Fine
Arts, Family Science, French, German,
History, Japanese, Music, Political Science,
Psychology, Spanish
LIBERAL ARTS, 9 HOURS
used in major
Take 9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

# GRADUATE SCHOOL OF ENGINEERING \& COMPUTER SCIENCE 

## AREAS OF STUDY

Computer Engineering (CENG)
Computer Science (CMSC)
Electrical Engineering (ELEC)
Engineering (ENGR)
Mathematics (MATH)
Mechanical Engineering (MECH)

## DUAL DEGREES OFFERED

M.S.C.S. Degree in Computer Science with Artificial Intelligence Emphasis
B.S. Degree in Computer Science
B.S. Degree in Computer Science with Business
B.S. Degree in Computer Science with Cyber Security
B.S. Degree in Computer Science w/ Gaming \& Animation
M.S.C.S. Degree in Computer Science with Cyber Security Emphasis
B.S. Degree in Computer Science
B.S. Degree in Computer Science with Business
B.S. Degree in Computer Science with Cyber Security
B.S. Degree in Computer Science w/ Gaming \& Animation
M.S.C.S. Degree in Computer Science with Data Science Emphasis
B.S. Degree in Computer Science
B.S. Degree in Computer Science with Business
B.S. Degree in Computer Science with Cyber Security
B.S. Degree in Computer Science w/ Gaming \& Animation
M.S.C.S. Degree in Computer Science with Software Eng. Emphasis
B.S. Degree in Computer Science
B.S. Degree in Computer Science with Business
B.S. Degree in Computer Science with Cyber Security
B.S. Degree in Computer Science w/ Gaming \& Animation
M.S.E. Degree in Computer Engineering
B.S.C.E. Degree in Computer Engineering
B.S.C.E. Degree in Computer Eng. w/ Software Eng. Emphasis
B.S.E.E. Degree in Electrical Engineering
B.S.E.E. Degree in Electrical Eng. w/ Software Eng. Emphasis
M.S.E. Degree in Electrical Engineering
B.S.C.E. Degree in Computer Engineering
B.S.C.E. Degree in Computer Eng. w/ Software Eng. Emphasis
B.S.E.E. Degree in Electrical Engineering
B.S.E.E. Degree in Electrical Eng. w/ Software Eng. Emphasis
M.S.E. Degree in Software Engineering
B.S.C.E. Degree in Computer Engineering
B.S.C.E. Degree in Computer Eng. w/ Software Eng. Emphasis B.S.E.E. Degree in Electrical Engineering
B.S.E.E. Degree in Electrical Eng. w/ Software Eng. Emphasis

Craig Johnson, Ph.D., Professor of Mathematics
Donald Leftwich, M.A., Associate Professor of Mathematics and Computer Sciences
Steven Maher, M.S.E.E., Associate Professor of Electrical and Computer Engineering
Byron Newberry, Ph.D., Dean of College of Engineering and Computer Science, Professor of Mechanical Engineering
Robert Nix, Ph.D., Assistant Professor of Computer Science
David North, M.S., Associate Professor of Computer Science
Kevin Plumlee, Ph.D., Department Chair of Mechanical Engineering, Assistant Professor of Mechanical Engineering
Pat Smith, M.S., Associate Professor of Electrical and Computer Engineering
David Waldo, Ph.D., Professor of Electrical and Computer Engineering Joe Watson, M.S.E.E., Professor of Electrical and Computer Engineering
Wayne Whaley, Ph.D., Professor of Mechanical Engineering
Debra Wood, M.S.E., Assistant Professor of Mechanical Engineering

## Admissions Requirements

To be accepted into the dual bachelor/master degree programs, an applicant must:

- Be a current student and admitted to his/her undergraduate program of study,
- Apply prior to taking 90 hours in the undergraduate studies (not including prior learning credits-AP credits etc.),
- Have a major GPA of 3.5 and a cumulative GPA of 3.25 , and
- Be accepted in the graduate program before taking any 5000 level course.

Once the full requirements of both degrees are met, the student will be awarded both a bachelor and master degree in their program.

Note: It is possible for a student to change back to an undergraduate program at any time and receive a degree under that program if the requirements have been met.

## Student Financial Status

A student in a dual undergraduate/graduate degree program is considered a graduate student when he/she has completed 8 full time ( 12 hours) semesters, including full time summer semesters, of undergraduate studies. These full-time semesters may be completed at OC or another insitutiton. The change to graduate student status will impact a student's use of scholarships, financial aid, and tuition rates.

Note: For more information concerning graduate degrees, refer to the graduate catalog at www.oc.edu/registrar.

## FACULTY

Kenneth Bell, M.S. Assistant Professor of Electrical and Computer Engineering
Jeff Bigelow, Ph.D., Department Chair of Electrical \& Computer Engineering Professor of Electrical and Computer Engineering
Jennifer Bryan,Ph.D., Department Chair of Mathamatics, Professor of Mathematics
David Cassel, Ph.D., Professor of Mechanical Engineering
Curtis Coleman, Ph.D., Visiting Professor of Computer Science
Andy Harbert, M.S., Department Chair of Computer Science, Assistant
Professor of Computer Science

## B.S. DEGREE IN COMPUTER SCI. \& M.S.C.S. DEGREE IN COMP SCIENCE W/ <br> ARTIFICIAL INTELLIGENCE EMPHASIS 68 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science, see page 61.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: 24 HOURS LOWER DIVIIION |  | MATH-2214 | Calculus II with Analytical Geometry |
| :---: | :---: | :---: | :---: |
|  |  | MATH-2913 | Statistical Methods |
| CMSC-1113 | Programming I | MATH-3513 | Linear Algebra |
| CMSC-1123 | Programming II |  |  |
| CMSC-1313 | Software Engineering I-Introduction | M.S.C.S. Degree Requirements: |  |
| CMSC-2133 | Object Oriented Programming | 12 HOURS COMPUTER SCIENCE FOUNDATION |  |
| CMSC-2213 | Internet Application Development | CMSC-5003 | Foundations of Technology Ethics and Values |
| CMSC-2233 | Data Structures and Algorithm Analysis | CMSC-5333 | Advanced Database Systems |
| CMSC-2313 | Software Engineering II-Practices | CMSC-5343 | Algorithm Analysis |
| CMSC-2413 | Assembly Language | CMSC-5613 | Object Oriented Software Engineering |
| 21 HOURS UPPER DIVISION |  | 6 HOURS ELECTIVES CHOSEN FROM |  |
| CMSC-3313 | Software Engineering III-Ethics* | Choose 6 hours of 5000 level CMSC not already taken |  |
| CMSC-3443 | Computer Organization and Architecture |  |  |
| CMSC-4123 | Software Engineering IV-Tools | 12 HOURS ARTIFICIAL INTELLIGENCE |  |
| CMSC-4243 | Software Engineering V-Projects | CMSC-5723 | Machine Learning |
| CMSC-4323 | Database Systems | CMSC-5753 | Intelligent Systems |
| CMSC-4413 | Operating Systems | CMSC-5763 | Artificial Intelligence Project I |
| CMSC-4513 | Programming Languages | CMSC-5773 | Artificial Intelligence Project II |
| 12 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM |  |  |  |
| CMSC-4103 | Data Communications and Networking* | *Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work. |  |
| CMSC-4113 | Human Computer Interaction* |  |  |
| CMSC-4223 | Computer Simulation* |  |  |
| CMSC-4233 | Mobile Application Development* |  |  |
| CMSC-4423 | Computer Graphics* |  |  |
| CMSC-4443 | Information System Security* |  |  |
| CMSC-4713 | Artificial Intelligence* |  |  |
| 3 HOURS COMMUNICATION CHOSEN FROM |  |  |  |
| COMM-3113 | Business and Professional Communicatio |  |  |
| ENGL-3493 | Technical Writing |  |  |

## 17 HOURS MATHEMATICS

MATH-1623 Introduction to Discrete Mathematics
MATH-2114 Calculus I with Analytical Geometry

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS <br> MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German Arts, Family Science, French, German,
History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMP SCI. W/ BUSINESS \& M.S.C.S. DEGREE IN COMP SCIENCE W/ ARTIFICIAL INTELLIGENCE EMPHASIS 72 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Business, see page 62.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: 24 HOURS LOWER DIVISION |  | ACCT-2213 | Accounting Principles II |
| :---: | :---: | :---: | :---: |
|  |  | ECON-2113 | Macroeconomics |
| CMSC-1113 | Programming I | FINC-3113 | Financial Management |
| CMSC-1123 | Programming II | INFO-3113 | Principles of Electronic Business |
| CMSC-1313 | Software Engineering I-Introduction | INFO-3613 | Management Information Systems |
| CMSC-2133 | Object Oriented Programming | MGMT-3113 | Principles of Management |
| CMSC-2213 | Internet Application Development | MGMT-3213 | Production/Operations Management |
| CMSC-2233 | Data Structures and Algorithm Analysis | MKTG-3313 | Principles of Marketing |
| CMSC-2313 | Software Engineering II-Practices |  |  |
| CMSC-2413 | Assembly Language | M.S.C.S. Degree Requirements: |  |
| 21 HOURS UPPER DIVISION |  |  |  |
| CMSC-3313 | Software Engineering III-Ethics* | CMSC-5003 | Foundations of Technology Ethics and Values |
| CMSC-3443 | Computer Organization and Architecture | CMSC-5333 | Advanced Database Systems |
| CMSC-4123 | Software Engineering IV-Tools |  | Algorithm Analysis |
| CMSC-4243 | Software Engineering V-Projects | CMSC-5613 | Object Oriented Software Engineering |
| CMSC-4323 | Database Systems | 6 HOURS EL |  |
| CMSC-4413 | Operating Systems | 6 Hours 6 L | OOO level CMSC |
| CMSC-4513 | Programming Languages |  | level CMSC not already ta |
| 9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM |  | 12 HOURS ARTIFICIAL INTELLIGENCE |  |
| CMSC-4103 | Data Communications and Networking* | CMSC-5723 | Machine Learning |
| CMSC-4113 | Human Computer Interaction* | CMSC-5753 | Intelligent Systems |
| CMSC-4223 | Computer Simulation | CMSC-5763 | Artificial Intelligence Project I |
| CMSC-4233 | Mobile Application Development* | CMSC-5773 | Artificial Intelligence Project II |
| CMSC-4423 | Computer Graphics* | *Up to 9 hours | undergraduate requirements should be satisfied by |
| CMSC-4443 | Information System Security* | graduate cour |  |
| CMSC-4713 | Artificial Intelligence* |  |  |
| 3 HOURS COMMUNICATION CHOSEN FROM |  |  |  |
| COMM-3113 | Business and Professional Communication |  |  |
| ENGL-3493 | Technical Writing |  |  |
| 6 HOURS MATHEMATICS |  |  |  |
| MATH-1623 | Introduction to Discrete Mathematics |  |  |
| MATH-2913 | Statistical Methods |  |  |
| 18 HOURS BUSINESS CHOSEN FROM |  |  |  |
| ACCT-2113 | Accounting Principles I |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS

| MATH-2114 |
| :--- |
| Geometry |$\quad$ Calculus I with Analytical

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI W/ CYBER SECURITY \& M.S.C.S. DECREE IN COMP SCI W/ ARTIFICIAL INTELLIGENCE EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Cyber Security see page 63.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements: <br> 24 HOURS LOWER DIVISION COURSES <br> CMSC-1113 Programming I <br> CMSC-1123 Programming II <br> CMSC-1313 Software Engineering I-Introduction <br> CMSC-2133 Object Oriented Programming <br> CMSC-2213 Internet Application Development <br> CMSC-2233 Data Structures and Algorithm Analysis <br> CMSC-2313 Software Engineering II-Practices <br> CMSC-2413 Assembly Language

21 HOURS UPPER DIVISION COURSES

| CMSC-3313 | Software Engineering III-Ethics ${ }^{*}$ |
| :--- | :--- |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |

9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation*
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Cryptography*
CMSC-4673 Computer System Risk Management*
CMSC-4683 Offensive Security and Penentration Testing*
CMSC-4713 Artificial Intelligence*

## 3 HOURS CHOSEN FROM

COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

X6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods
15 HOURS CYBER SECURITY
CMSC-3633 Introduction to Cyber Security
CMSC-4103 Data Communication \& Networking
CMSC-4643 Network Security
CMSC-4653 Cloud Architecture and Security
CMSC-4663 Network Forensics
6 HOURS ELECTIVES
Any MATH 2000 level or above or upper division Computer Science not already taken

## M.S.C.S. Degree Requirements: <br> 12 HOURS COMPUTER SCIENCE FOUNDATION

CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
Choose 6 hours of 5000 level CMSC not already taken
12 HOURS ARTIFICIAL INTELLIGENCE
CMSC-5723 Machine Learning
CMSC-5753 Intelligent Systems
CMSC-5763 Artificial Intelligence Project I
CMSC-5773 Artificial Intelligence Project II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
MATH-2114 Calculus I with Analytical Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

BIBL-4523 | Capstone: Christ and His |
| :--- |
| World |

| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to <br> American Government |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. Histo |

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI W/ GAMING \& ANIM \& M.S.C.S. DEGREE IN COMP SCI W/ ARTIFICIAL INTELLIGENCE EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Gaming and Animation, see page 64.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :---: | :---: |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
| 21 HOURS UPPER DIVISION |  |
| CMSC-3313 | Software Engineering III-Ethics* |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |
| 9 HOURS UP | SION COMPUTER SCIENCE CHOSEN FROM |
| CMSC-4103 | Data Communications and Networking* |
| CMSC-4113 | Human Computer Interaction* |
| CMSC-4223 | Computer Simulation |
| CMSC-4233 | Mobile Application Development* |
| CMSC-4423 | Computer Graphics* |
| CMSC-4443 | Information System Security* |
| CMSC-4713 | Artificial Intelligence* |
| 3 HOURS CHOSEN FROM |  |
| COMM-3113 | Business and Professional Communication |
| ENGL-3493 | Technical Writing |
| 6 HOURS MATHEMATICS |  |
| MATH-1623 | Introduction to Discrete Mathematics |
| MATH-2913 | Statistical Methods |
| 15 HOURS GAMING AND ANIMATION |  |
| ARTS-2133 | Introduction to Game Technology |

ARTS-2743 3D Modeling I
ARTS-3393 History of Gaming and Animation
ARTS-3453 Team Game Production I
CMSC-3203 Game Programming

## 6 HOURS CHOSEN FROM

ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3513 Linear Algebra
Any course from FINC, INFO, MGMT, or MKTG number 3000 or above
Any physics course. Any upper level computer science course not already used

## M.S.C.S. Degree Requirements: <br> 12 HOURS COMPUTER SCIENCE FOUNDATION

CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
Choose 6 hours of 5000 level CMSC not already taken
12 HOURS ARTIFICIAL INTELLIGENCE
CMSC-5723 Machine Learning
CMSC-5753 Intelligent Systems
CMSC-5763 Artificial Intelligence Project I
CMSC-5773 Artificial Intelligence Project II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMP SCIENCE \& M.S.C.S. DEGREE IN COMP SCI W/ CYBER SECURITY EMPHASIS 68 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science, see page 61.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :--- | :--- |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
| 21 HOURS UPPER DIVISION |  |
| CMSC-3313 | Software Engineering III-Ethics* |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |
| 12 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM  <br> CMSC-4103 Data Communications and Networking* <br> CMSC-4113 Human Computer Interaction* <br> CMSC-4223 Computer Simulation* <br> CMSC-4233 Mobile Application Development* <br> CMSC-4423 Computer Graphics* <br> CMSC-4443 Information System Security* <br> CMSC-4713 Artificial Intelligence* <br> 3 HOURS COMMUNICATION CHOSEN FROM  <br> COMM-3113 Business and Professional Communication <br> ENGL-3493 Technical Writing <br> 17 HOURS MATHEMATICS  <br> MATH-1623 Introduction to Discrete Mathematics <br> MATH-2114 Calculus I with Analytical Geometry <br> MATH-2214 Calculus II with Analytical Geometry <br> MATH-2913 Statistical Methods <br>   |  |

## MATH-3513 Linear Algebra

## M.S.C.S. Degree Requirements:

 12 HOURS COMPUTER SCIENCE FOUNDATIONCMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
CMSC-5113 Software and Network Engineering
CMSC-5213 Computer Networks
CMSC-5223 Computer Simulation
CMSC-5233 Mobile Application Development
CMSC-5313 Human Computer Interaction
CMSC-5353 Big Data Management
CMSC-5423 Computer Graphics
CMSC-5433 Compiler Construction
CMSC-5523 Information Systems Security
CMSC-5643 Network Security with Lab
CMSC-5723 Machine Learning
CMSC-5713 Artificial Intelligence
CMSC-5753 Intelligent Systems

## 12 HOURS CYBER SECURITY

CMSC-5653 Cloud Architecture and Security
CMSC-5663 Network Forensics
CMSC-5673 Computer Systems Risk Management
CMSC-5683 Offensive Security and Penetration Testing
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BILL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMP SCI W/ BUSINESS \& M.S.C.S. DEGREE IN COMP SCI W/ CYBER SECURITY EMPHASIS 72 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Business, see page 62.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: <br> 24 HOURS LOWER DIVISION |  | ACCT-2213 | Accounting Principles II |
| :---: | :---: | :---: | :---: |
|  |  | ECON-2113 | Macroeconomics |
| CMSC-1113 | Programming I | FINC-3113 | Financial Management |
| CMSC-1123 | Programming II | INFO-3113 | Principles of Electronic Business |
| CMSC-1313 | Software Engineering I-Introduction | INFO-3613 | Management Information Systems |
| CMSC-2133 | Object Oriented Programming | MGMT-3113 | Principles of Management |
| CMSC-2213 | Internet Application Development | MGMT-3213 | Production/Operations Management |
| CMSC-2233 | Data Structures and Algorithm Analysis | MKTG-3313 | Principles of Marketing |
| CMSC-2313 | Software Engineering II-Practices |  |  |
| CMSC-2413 | Assembly Language | M.S.C.S. Degree Requirements: |  |
| 21 HOURS UPPER DIVISION |  | 12 HOURS COMPUTER SCIENCE FOUNDATION |  |
| CMSC-3313 | Software Engineering III-Ethics* | CMSC-5003 | Foundations of Technology Ethics and Values |
| CMSC-3443 | Computer Organization and Architecture | CMSC-5333 | Advanced Database Systems |
| CMSC-4123 | Software Engineering IV-Tools | CMSC-5343 | Algorithm Analysis |
| CMSC-4243 | Software Engineering V-Projects | CMSC-5613 |  |
| CMSC-4323 | Database Systems | 6 HOURS ELECTIVES CHOSEN FROM |  |
| CMSC-4413 | Operating Systems | CMSC-5113 | Software and Network Engineering |
| CMSC-4513 | Programming Languages | $\begin{aligned} & \text { CMSC-5113 } \\ & \text { CMSC-5213 } \end{aligned}$ | Software and Network Engineering Computer Networks |
| 9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM |  | CMSC-5223 | Computer Simulation |
| CMSC-4103 | Data Communications and Networking* | CMSC-5233 | Mobile Application Development |
| CMSC-4113 | Human Computer Interaction* | CMSC-5313 <br> CMSC-5353 | Human Computer Interaction |
| CMSC-4223 | Computer Simulation |  | Big Data Management |
| CMSC-4233 | Mobile Application Development* | CMSC-5423 | Computer Graphics |
| CMSC-4423 | Computer Graphics* | CMSC-5433 | Compiler Construction |
| CMSC-4443 | Information System Security* | CMSC-5523 | Information Systems Security |
| CMSC-4713 | Artificial Intelligence* | CMSC-5643 | Network Security with Lab |
|  |  | CMSC-5723 | Machine Learning |
| 3 HOURS COMMUNICATION CHOSEN FROM |  | CMSC-5713 | Artificial Intelligence |
| COMM-3113 | Business and Professional Communication | CMSC-5753 | Intelligent Systems |
| ENGL-3493 | Technical Writing |  |  |
|  |  | 12 HOURS CYBER SECURITY |  |
| 6 HOURS MATHEMATICS |  | CMSC-5653 | Cloud Architecture and Security |
| MATH-1623 | Introduction to Discrete Mathematics | CMSC-5663 | Network Forensics |
| MATH-2913 | Statistical Methods | CMSC-5673 | Computer Systems Risk Management |
|  |  | CMSC-5683 | Offensive Security and Penetration Testing |
| 18 HOURS BUSINESS CHOSEN FROM |  | *Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work. |  |
| ACCT-2113 | Accounting Principles I |  |  |

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I ENGL-1213 English Composition II COMM-1213 Oral Communication

MATHEMATICS, 3 HOURS
MATH-2114 Calculus I with Analytical Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI W/ CYBER SECURITY \& M.S.C.S. DEGREE IN COMP SCI W/ CYBER SECURITY EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Cyber Security, see page 63.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements:

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION COURSES
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Cryptography
CMSC-4673 Computer System Risk Management CMSC-4683 Offensive Security and Penentration Testing
CMSC-4713 Artificial Intelligence
3 HOURS CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing
6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods

| 15 HOURS CYBER | SECURITY |
| :--- | :--- |
| CMSC-3633 | Introduction to Cyber Security |
| CMSC-4103 | Data Communication \& Networking |
| CMSC-4643 | Network Security |
| CMSC-4653 | Cloud Architecture and Security |
| CMSC-4663 | Network Forensics |

6 HOURS ELECTIVES
Any MATH 2000 level or above or upper division Computer Science not already taken

## M.S.C.S. Degree Requirements:

 12 HOURS COMPUTER SCIENCE FOUNDATIONCMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

CMSC-5113 Software and Network Engineering
CMSC-5213 Computer Networks
CMSC-5223 Computer Simulation
CMSC-5233 Mobile Application Development
CMSC-5313 Human Computer Interaction
CMSC-5353 Big Data Management
CMSC-5423 Computer Graphics
CMSC-5433 Compiler Construction
CMSC-5523 Information Systems Security
CMSC-5643 Network Security with Lab
CMSC-5723 Machine Learning
CMSC-5713 Artificial Intelligence
CMSC-5753 Intelligent Systems

## 12 HOURS CYBER SECURITY

CMSC-5653 Cloud Architecture and Security
CMSC-5663 Network Forensics
CMSC-5673 Computer Systems Risk Management
CMSC-5683 Offensive Security and Penetration Testing
*Up to 9 hours of these undergraduate requirements should be satisfied by
graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience
CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His
World World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMP SCI W/ GAMING AND ANIMATION \& M.S.C.S. DEGREE IN COMP SCI W/ CYBER SECURITY EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Gaming and Animation, see page 64. For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.

Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements: <br> 24 HOURS LOWER DIVISION

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages

## 9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM

CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*

| 3 HOURS CHOSEN FROM |  |
| :--- | :--- |
| COMM-3113 | Business and Professional Communication |
| ENGL-3493 | Technical Writing |

6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods
15 HOURS GAMING AND ANIMATION
ARTS-2133 Introduction to Game Technology
ARTS-2743 3D Modeling I
ARTS-3393 History of Gaming and Animation
ARTS-3453 Team Game Production I

CMSC-3203 Game Programming
6 HOURS CHOSEN FROM
ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3513 Linear Algebra
Any course from FINC, INFO, MGMT, or MKTG number 3000 or above
Any physics course. Any upper level computer science course not already used

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
CMSC-5113 Software and Network Engineering
CMSC-5213 Computer Networks
CMSC-5223 Computer Simulation
CMSC-5233 Mobile Application Development
CMSC-5313 Human Computer Interaction
CMSC-5353 Big Data Management
CMSC-5423 Computer Graphics
CMSC-5433 Compiler Construction
CMSC-5523 Information Systems Security
CMSC-5643 Network Security with Lab
CMSC-5723 Machine Learning
CMSC-5713 Artificial Intelligence
CMSC-5753 Intelligent Systems
12 HOURS CYBER SECURITY
CMSC-5653 Cloud Architecture and Security
CMSC-5663 Network Forensics
CMSC-5673 Computer Systems Risk Management
CMSC-5683 Offensive Security and Penetration Testing
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
MATH-2114 Calculus I with Analytica Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMPUTER SCI. \& M.S.C.S. DEGREE IN COMP SCIENCE W/ <br> DATA SCIENCE EMPHASIS 68 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science, see page 61.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :--- | :--- |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |

21 HOURS UPPER DIVISION
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
12 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation*
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*
3 HOURS COMMUNICATION CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

## 17 HOURS MATHEMATICS

MATH-1623 Introduction to Discrete Mathematics
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2913 Statistical Methods
MATH-3513 Linear Algebra

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken
12 HOURS DATA SCIENCE
CMSC-5353 Big Data Management
CMSC-5363 Data Science Project I
CMSC-5373 Data Science Project II
CMSC-5723 Machine Learning
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI. W/ BUSINESS \& M.S.C.S. DEGREE IN COMP SCIENCE W/ DATA SCIENCE EMPHASIS 72 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Business, see page 62.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :--- | :--- |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
| 21 HOURS UPPER DIVISION |  |
| CMSC-3313 | Software Engineering III-Ethics* |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |

9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*
3 HOURS COMMUNICATION CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

## 6 HOURS MATHEMATICS

MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods

## 18 HOURS BUSINESS CHOSEN FROM

ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
ECON-2113 Macroeconomics
FINC-3113 Financial Management
INFO-3113 Principles of Electronic Business
INFO-3613 Management Information Systems
MGMT-3113 Principles of Management
MGMT-3213 Production/Operations Management
MKTG-3313 Principles of Marketing
M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken
12 HOURS DATA SCIENCE
CMSC-5353 Big Data Management
CMSC-5363 Data Science Project I
CMSC-5373 Data Science Project II
CMSC-5723 Machine Learning
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I ENGL-1213 English Composition II COMM-1213 Oral Communication

MATHEMATICS, 3 HOURS
MATH-2114 Calculus I with Analytical Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI W/ CYBER SECURITY \& M.S.C.S. DEGREE IN COMP SCI W/ DATA SCIENCE EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Cyber Security, see page 63.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements:

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION COURSES
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Cryptography
CMSC-4673 Computer System Risk Management CMSC-4683 Offensive Security and Penentration Testing
CMSC-4713 Artificial Intelligence

## 15 HOURS CYBER SECURITY

CMSC-3633 Introduction to Cyber Security
CMSC-4103 Data Communication \& Networking
CMSC-4643 Network Security
CMSC-4653 Cloud Architecture and Security
CMSC-4663 Network Forensics
6 HOURS ELECTIVES
Any MATH 2000 level or above or upper division Computer Science not already taken

## M.S.C.S. Degree Requirements:

## 12 HOURS COMPUTER SCIENCE FOUNDATION

CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken
12 HOURS DATA SCIENCE
CMSC-5353 Big Data Management
CMSC-5363 Data Science Project I
CMSC-5373 Data Science Project II
CMSC-5723 Machine Learning
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.
3 HOURS CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing
6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His

| World |
| :--- |


| POLITICAL |
| :---: |
| POLS-2113 |
| $\quad$Introduction to <br> American Government |
| AMERICAN |


| HIST-1223 | Turning Points in U.S. History |
| :--- | :--- |

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

## LIBERAL ARTS, 9 HOURS

9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI. GAMING \& ANIM. \& M.S.C.S. DEGREE IN COMP SCIENCE W/ DATA SCIENCE EMPHASIS 75 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Gaming and Animation, see page 64. For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.

Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

```
B.S. Degree Requirements: 24 HOURS LOWER DIVISION
\begin{tabular}{ll} 
CMSC-1113 & Programming I \\
CMSC-1123 & Programming II \\
CMSC-1313 & Software Engineering I-Introduction \\
CMSC-2133 & Object Oriented Programming \\
CMSC-2213 & Internet Application Development \\
CMSC-2233 & Data Structures and Algorithm Analysis \\
CMSC-2313 & Software Engineering II-Practices \\
CMSC-2413 & Assembly Language
\end{tabular}
```


## 21 HOURS UPPER DIVISION

```
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
```

9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*

## 3 HOURS CHOSEN FROM

COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing
6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods

## 15 HOURS GAMING AND ANIMATION

ARTS-2133 Introduction to Game Technology
ARTS-2743 3D Modeling I
ARTS-3393 History of Gaming and Animation
ARTS-3453 Team Game Production I
CMSC-3203 Game Programming
6 HOURS CHOSEN FROM
ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3513 Linear Algebra
Any course from FINC, INFO, MGMT, or MKTG number 3000 or above
Any physics course. Any upper level computer science course not already used

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
Choose 6 hours of 5000 level CMSC not already taken
12 HOURS DATA SCIENCE
CMSC-5353 Big Data Management
CMSC-5363 Data Science Project I
CMSC-5373 Data Science Project II
CMSC-5723 Machine Learning
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE
COMMUNICATION, 9 HOURS

| ENGL-1113 | English Composition I |
| :--- | :--- |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS |  |
| MATH-2114 | Calculus I: with Analytical |
|  | Geometry |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BILL-2202 Story of the Old Testament <br> BIBL-2302 Story of the New Testament |  |$.$

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ART-2033 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMPUTER SCI. \& M.S.C.S. DEGREE IN COMP SCIENCE W/ SOFTWARE ENG. EMPHASIS 68 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science, see page 61.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements:

24 HOURS LOWER DIVISION
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language

## 21 HOURS UPPER DIVISION

CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
12 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation*
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*
3 HOURS COMMUNICATION CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

## 17 HOURS MATHEMATICS

| MATH-1623 | Introduction to Discrete Mathematics |
| :--- | :--- |
| MATH-2114 | Calculus I with Analytical Geometry |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2913 | Statistical Methods |
| MATH-3513 | Linear Algebra |

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken
12 HOURS SOFTWARE ENGINEERING
CMSC-5623 Software Engineering for Trustworthy Software
CMSC-5633 Patterns of Object Oriented Systems
CMSC-5733 Software Engineering Projects I
CMSC-5743 Software Engineering Projects II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS <br> MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German Arts, Family Science, rrench, German,
History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S. DEGREE IN COMP SCI W/ BUSINESS \& M.S.C.S. DEGREE IN COMP SCI. W/ SOFTWARE ENG. EMPHASIS 72 UG HOURS, 30 GRADUATE HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Business, see page 62.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :--- | :--- |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering I-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
| 21 HOURS UPPER DIVISION |  |
| CMSC-3313 | Software Engineering III-Ethics* |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |
| 9 HOURS UPPER DIVISION comPUTER SCIENCE CHOSEN FROM |  |
| CMSC-4103 | Data Communications and Networking* |
| CMSC-4113 | Human Computer Interaction** |
| CMSC-4223 | Computer Simulation |
| CMSC-4233 | Mobile Application Development* |
| CMSC-4423 | Computer Graphics* |
| CMSC-4443 | Information System Security* |
| CMSC-4713 | Artificial Intelligence* |
| 3 HOURS COMMUNICATION CHOSEN FROM |  |
| COMM-3113 | Business and Professional Communication |
| ENGL-3493 | Technical Writing |
| 6 HOURS MATHEMATICS |  |
| MATH-1623 | Introduction to Discrete Mathematics |
| MATH-2913 | Statistical Methods |
|  |  |

ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
ECON-2113 Macroeconomics
FINC-3113 Financial Management
INFO-3113 Principles of Electronic Business
INFO-3613 Management Information Systems
MGMT-3113 Principles of Management
MGMT-3213 Production/Operations Management
MKTG-3313 Principles of Marketing

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken
12 HOURS SOFTWARE ENGINEERING
CMSC-5623 Software Engineering for Trustworthy Software
CMSC-5633 Patterns of Object Oriented Systems
CMSC-5733 Software Engineering Projects I
CMSC-5743 Software Engineering Projects II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## 18 HOURS BUSINESS CHOSEN EROM

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I ENGL-1213 English Composition II COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS

| MATH-2114 | Calculus I with Analytical |
| :--- | :--- |
| Geometry |  |

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI W/ CYBER SECURITY \& M.S.C.S. DEGREE IN COMP SCI W/ DATA SCIENCE EMPHASIS 75 UG HOURS, 30 GR HOURS

For program description and learning outcomes for a B.S. degree in Computer Science with Cyber Security, see page 63.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## B.S. Degree Requirements:

## 24 HOURS LOWER DIVISION COURSES

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-1313 Software Engineering I-Introduction
CMSC-2133 Object Oriented Programming
CMSC-2213 Internet Application Development
CMSC-2233 Data Structures and Algorithm Analysis
CMSC-2313 Software Engineering II-Practices
CMSC-2413 Assembly Language
21 HOURS UPPER DIVISION COURSES
CMSC-3313 Software Engineering III-Ethics*
CMSC-3443 Computer Organization and Architecture
CMSC-4123 Software Engineering IV-Tools
CMSC-4243 Software Engineering V-Projects
CMSC-4323 Database Systems
CMSC-4413 Operating Systems
CMSC-4513 Programming Languages
15 HOURS CYBER SECURITY
CMSC-3633 Introduction to Cyber Security
CMSC-4103 Data Communication \& Networking
CMSC-4643 Network Security
CMSC-4653 Cloud Architecture and Security
CMSC-4663 Network Forensics
6 HOURS ELECTIVES
Any MATH 2000 level or above or upper division Computer Science not already taken

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering

## 6 HOURS ELECTIVES CHOSEN FROM

Choose 6 hours of 5000 level CMSC not already taken

## 12 HOURS SOFTWARE ENGINEERING

CMSC-5623 Software Engineering for Trustworthy Software
CMSC-4113 Human Computer Interaction
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development
CMSC-4423 Computer Graphics
CMSC-4443 Cryptography
CMSC-4673 Computer System Risk Management CMSC-4683 Offensive Security and Penentration Testing
CMSC-4713 Artificial Intelligence
CMSC-5633 Patterns of Object Oriented Systems
CMSC-5733 Software Engineering Projects I
CMSC-5743 Software Engineering Projects II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

3 HOURS CHOSEN FROM
$\begin{array}{ll}\text { COMM-3113 } & \text { Business and Professional Communication } \\ \text { ENGL-3493 } & \text { Technical Writing }\end{array}$
ENGL-3493 Technical Writing
6 HOURS MATHEMATICS
MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods
,

路
For program description and learning outcomes for the M. . . . . degree please refer to the graduate cat,
HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM

UNIVERSTV CORE CURRICULUM:

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament


## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMP SCI. W/ GAMING \& ANIMATION \& M.S.C.S. DEGREE IN COMP SCI W/ SOFTWARE ENG EMPHASIS 75 UG HOURS, 30 GRADUATE HRS

For program description and learning outcomes for a B.S. degree in Computer Science with Gaming and Animation, see page 64.
For program description and learning outcomes for the M.S.C.S. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| B.S. Degree Requirements: |  |
| :--- | :--- |
| 24 HOURS LOWER DIVISION |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-1313 | Software Engineering II-Introduction |
| CMSC-2133 | Object Oriented Programming |
| CMSC-2213 | Internet Application Development |
| CMSC-2233 | Data Structures and Algorithm Analysis |
| CMSC-2313 | Software Engineering II-Practices |
| CMSC-2413 | Assembly Language |
|  |  |
| 21 HOURS UPPER DIVISION |  |
| CMSC-3313 | Software Engineering III-Ethics* |
| CMSC-3443 | Computer Organization and Architecture |
| CMSC-4123 | Software Engineering IV-Tools |
| CMSC-4243 | Software Engineering V-Projects |
| CMSC-4323 | Database Systems |
| CMSC-4413 | Operating Systems |
| CMSC-4513 | Programming Languages |

9 HOURS UPPER DIVISION COMPUTER SCIENCE CHOSEN FROM
CMSC-4103 Data Communications and Networking*
CMSC-4113 Human Computer Interaction*
CMSC-4223 Computer Simulation
CMSC-4233 Mobile Application Development*
CMSC-4423 Computer Graphics*
CMSC-4443 Information System Security*
CMSC-4713 Artificial Intelligence*
3 HOURS CHOSEN FROM
COMM-3113 Business and Professional Communication
ENGL-3493 Technical Writing

## 6 HOURS MATHEMATICS

MATH-1623 Introduction to Discrete Mathematics
MATH-2913 Statistical Methods
15 HOURS GAMING AND ANIMATION
ARTS-2133 Introduction to Game Technology
ARTS-2743 3D Modeling I
ARTS-3393 History of Gaming and Animation
ARTS-3453 Team Game Production I

## 6 HOURS CHOSEN FROM

ACCT-2113 Accounting Principles I
ACCT-2213 Accounting Principles II
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3513 Linear Algebra
Any course from FINC, INFO, MGMT, or MKTG number 3000 or above Any physics course. Any upper level computer science course not already used

## M.S.C.S. Degree Requirements:

12 HOURS COMPUTER SCIENCE FOUNDATION
CMSC-5003 Foundations of Technology Ethics and Values
CMSC-5333 Advanced Database Systems
CMSC-5343 Algorithm Analysis
CMSC-5613 Object Oriented Software Engineering
6 HOURS ELECTIVES CHOSEN FROM
Choose 6 hours of 5000 level CMSC not already taken
12 HOURS SOFTWARE ENGINEERING
CMSC-5623 Software Engineering for Trustworthy Software
CMSC-5633 Patterns of Object Oriented Systems
CMSC-5733 Software Engineering Projects I
CMSC-5743 Software Engineering Projects II
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS <br> MATH-2114 Calculus I with Analytical Geometry

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BILL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from these departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts area
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.S.C.E. DEGREE IN COMPUTER ENGINEERING \& M.S.E. DEGREE IN COMPUTER ENGINEERING 85 UG HOURS, 30 GRADUATE HOURS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. For program description and learning outcomes for the B.S.C.E. degree, see page 66.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## 24 HOURS MATHEMATICS

MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3013 Differential Equations
ENGR-1113 Engineering Mathematics
ENGR-2113 ECE Mathematics I
ENGR-2123 ECE Mathematics II

8 HOURS SCIENCE
PHYS-2514 Physics I
PHYS-2614 Physics II
29 HOURS ENGINEERING AND COMPUTER SCIENCE
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar
20 HOURS COMPUTER ENGINEERING
CENG-3113 Data Communications
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
CENG-4223 Embedded Systems Design*
CENG-4732 Systems Design I
CENG-4743 Systems Design II
CENG-4753 Systems Design III

7 HOURS ELECTRICAL ENGINEERING
ELEC-3313 Electronic Devices
ELEC-3504 Signals and Systems

## 6 HOURS COMPUTER ENGINEERING ELECTIVES

CENG-4113 Software and Network Engineering*
CENG-4233 Advanced Computer Architecture*
CENG-4303 HDL Design of Microprocessors*

## M.S.E. Degree Requirements:

12 HOURS ENGINEERING FOUNDATION STUDIES
ENGR-5003 Foundations of Technology Ethics and Values
ENGR-5113 Random Variables and Stochastic
Processes (or a 5000-level MATH course)
ENGR-5223 Systems Engineering Management
6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF COMPUTER ENGINEERING ELECTIVES
CENG-5013 HDL Design of Microprocessors
CENG-5033 Software Systems Engineering
CENG-5113 Software and Network Engineering
CENG-5223 Embedded Systems Design
CENG-5233 Advanced Computer Architecture
3 HOURS OF ENGINEERING ELECTIVES CHOSEN FROM
CENG, ELEC COURSES
ENGR-5103 Innovation and Invention
3 HOURS OF CAPSTONE
ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
COMMUNICATION, 6 HOURS
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1312 Life of the Early Church: Acts
```

BIBL-2202 Story of the Old Testament BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His
World
POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS
used in major
PHYS-2514 Physics I

PHYS-2614 Physics II
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.C.E. DEGREE IN COMPUTER ENGINEERING \& M.S.E DEGREE IN ELECTRICAL ENGINEERING 85 UG HOURS, 30 GRADUATE HOURS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. For program description and learning outcomes for the B.S.C.E. degree, see page 66.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

|  |  |
| :--- | :--- |
| 24 HOURS MATHEMATICS |  |
| MATH-2114 | Calculus I with Analytical Geometry |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential Equations |
| ENGR-1113 | Engineering Mathematics |
| ENGR-2113 | ECE Mathematics I |
| ENGR-2123 | ECE Mathematics II |
|  |  |
| 8 HOURS SCIENCE |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |
|  |  |
| 29 HOURS ENGINEERING AND COMPUTER SCIENCE |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-2133 | Object-Oriented Programming |
| CMSC--4413 | Operating Systems |
| ENGR-111 | Introduction to Engineering |
| ENGR-1122 | Engineering Computing |
| ENGR-1242 | Engineering Fundamentals |
| ENGR-2544 | Introduction to Digital Systems |
| ENGR-2614 | Electrical Circuit Analysis |
| ENGR-2700 | Christian Engineer Seminar |
| ENGR-3213 | Engineering Economics |
| ENGR-4701 | Senior Engineering Seminar |
| 20 HOURS COMPUTER ENGINEERING |  |
| CENG-3113 | Data Communications |
| CENG-3203 | Intro to Microprocessors |
| CENG-3213 | Computer Systems |
| CENG-4233 | Embedded Systems Design* |
| CENG-4732 | Systems Design I |
| CENG-4743 | Systems Design II |
| CENG-4753 | Systems Design III |
|  |  |
| 7 HOURS ELECTRICAL ENGINEERING |  |
| ELEC-3313 | Electronic Devices |
| ELEC-3504 | Signals and Systems |
|  |  |


| 6 HOURS COMPUTER ENGINEERING ELECTIVES |  |
| :--- | :--- |
| CENG-4113 | Software and Network Engineering* |
| CENG-4233 | Advanced Computer Architecture* |
| CENG-4303 | HDL Design of Microprocessors* |

M.S.E. Degree Requirements:

12 HOURS ENGINEERING FOUNDATION STUDIES
ENGR-5003 Foundations of Technology Ethics and Values
ENGR-5113 Random Variables and Stochastic Processes (or a
5000 -level MATH course)
ENGR-5203 Systems Engineering
ENGR-5223 Systems Engineering Management
6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF ELECTRICAL ENGINEERING ELECTIVES
ELEC-5113 Communications Systems
ELEC-5323 Semiconductor Devices
ELEC-5383 Power System Analysis
ELEC-5393 Power System Protection
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
3 HOURS OF ENGINEERING ELECTIVES CHOSEN FROM
CENG, ELEC Courses
ENGR-5103 Innovation and Invention
3 HOURS OF CAPSTONE
ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

BIBL-2302 Story of the New Testamen
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience
CAPSTONE, 3 HOURS
CIBL-4523

| Capstone: Christ and His |
| :---: |
| World |

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.C.E. DEGREE IN COMPUTER ENGINEERING \& M.S.E. DEGREE IN SOFTWARE ENG. EMPHASIS 85 UG HOURS, 30 GRADUATE HOURS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. For program description and learning outcomes for the B.S.C.E. degree, see page 66.
For program description and learning outcomes for the M.S.E. degree. please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| 24 HOURS MATHEMATICS |  |
| :--- | :--- |
| MATH-2114 | Calculus I with Analytical Geom |
| MATH-214 | Calculus I I with Analytical Geom |
| MATH-2314 | Calculus II |
| MATH-3013 | Differential Equations |
| ENGR-1113 | Engineering Mathematics |
| ENGR-2113 | ECE Mathematics I |
| ENGR-2123 | ECE Mathematics II |
|  |  |
| 8 HOURS SCIENCE |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |
|  |  |
| 29 HOURS ENGINEERING AND comPUTER SCIENCE |  |
| CMSC-1113 | Programming I |
| CMSC-1123 | Programming II |
| CMSC-2133 | Object-Oriented Programming |
| CMSC-4413 | Operating Systems |
| ENGR-1111 | Introduction to Engineering |
| ENGR-1122 | Engineering Computing |
| ENGR-1242 | Engineering Fundamentals |
| ENGR-2544 | Introduction to Digital Systems |
| ENGR-2614 | Electrical Circuit Analysis |
| ENGR-2700 | Christian Engineer Seminar |
| ENGR-3213 | Engineering Economics |
| ENGR-4701 | Senior Engineering Seminar |

## 20 HOURS COMPUTER ENGINEERING

| CENG-3113 | Data Communications |
| :--- | :--- |
| CENG-3203 | Intro to Microprocessors |
| CENG-3213 | Computer Systems |
| CENG-4223 | Embedded Systems Design* |
| CENG-4732 | Systems Design I |
| CENG-4743 | Systems Design II |
| CENG-4753 | Systems Design III |

7 HOURS ELECTRICAL ENGINEERING

| ELEC-3313 | Electronic Devices |
| :--- | :--- |
| ELEC-3504 | Signals and Systems |

6 HOURS COMPUTER ENGINEERING ELECTIVES
CENG-4113 Software and Network Engineering*

| CENG-4233 | Advanced Computer Architecture* |
| :--- | :--- |
| CENG-4303 | HDL Design of Microprocessors* |

## M.S.E. Degree Requirements: <br> 12 HOURS ENGINEERING FOUNDATION STUDIES

ENGR-5003 Foundations of Technology Ethics and Values
ENGR-5113 Random Variables and Stochastic
Processes (or a 5000-level MATH course)
ENGR-5203 Systems Engineering
ENGR-5223 Systems Engineering Management
6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF COMPUTER ENGINEERING ELECTIVES
CENG-5013 HDL Design of Microprocessors
CENG-5113 Software and Network Engineering
CENG-5223 Embedded Systems Design
CENG-5233 Advanced Computer Architecture
CMSC-5613 Object-Oriented Software Engineering
CMSC-5623 Software Engineering for Trustworthy Software
ELEC-5113 Communications Systems
ELEC-5323 Semiconductor Devices
ELEC-5383 Power System Analysis
ELEC-5393 Power System Protection
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5103 Innovation and Invention

## 3 HOURS OF SOFTWARE ENGINEERING

ENGR-5033 Software Systems Engineering
3 HOURS OF CAPSTONE
ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 6 HOURS

## ENGL-1113 English Composition

Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

## CAPSTONE, 3 HOURS

CAPSTONE, 3 HOURS
CIBL-4523
Capstone: Christ and His
World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

```
GREAT WORKS, 3 HOURS
```

should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS
used in major
PHYS-2514 Physics I
PHYS-2614 Physics II

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.C.E. DEGREE IN COMPUTER ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DEGREE IN COMPUTER ENG. 85 UG HOURS, 30 GRADUATE HRS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.C.E. degree with software engineering emphasis, see page 67.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

## 24 HOURS MATHEMATICS

| MATH-2114 | Calculus I with Analytical Geometry |
| :--- | :--- |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential Equations |
| ENGR-1113 | Engineering Mathematics |
| ENGR-2113 | ECE Mathematics I |
| ENGR-2123 | ECE Mathematics II |

8 HOURS SCIENCE
PHYS-2514 Physics I
PHYS-2614 Physics II

## 29 HOURS ENGINEERING AND COMPUTER SCIENCE

CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 23 HOURS COMPUTER ENGINEERING

CENG-3113 Data Communications
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
CENG-4113 Software and Network Engineering*
CENG-4223 Embedded Systems Design*
CENG-4732 Systems Design I
CENG-4743 Systems Design II
CENG-4753 Systems Design III

## M.S.E. Degree Requirements:

12 HOURS ENGINEERING FOUNDATION STUDIES
ENGR-5003 Foundations of Technology Ethics and Values
ENGR-5113 Random Variables and Stochastic
Processes (or a 5000 -level MATH course)
ENGR-5203 Systems Engineering
ENGR-5223 Systems Engineering Management
6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF COMPUTER ENGINEERING ELECTIVES
CENG-5013 HDL Design of Microprocessors
CENG-5033 Software Systems Engineering
CENG-5113 Software and Network Engineering
CENG-5223 Embedded Systems Design
CENG-5233 Advanced Computer Architecture
3 HOURS OF ENGINEERING ELECTIVES CHOSEN FROM
CENG, ELEC COURSES
ENGR-5103 Innovation and Invention

## 3 HOURS OF CAPSTONE

ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## 10 HOURS ELECTRICAL ENGINEERING

ELEC-3504 Signals and Systems
ELEC-3523 Digital Signal Processing
ELEC-4523 Software Engineering of Real-Time Systems*

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
```

BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS

| BIBL-4523 | Capstone: Christ and His <br> World |
| :---: | :---: |

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

 should include literature ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion PicturesCOMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
used in major
used in major
PHYS-2514 Physics I
PHYS-2614 Physics II

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.C.E. DEGREE IN COMPUTER ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DEGREE IN ELEC ENGINEERING 85 UG HRS, 30 GRADUATE HRS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.C.E. degree with software engineering emphasis, see page 67.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| 24 HOURS MATHEMATICS |  |
| :--- | :--- |
| MATH-2114 | Calculus I w |
| MATH-2214 | Calculus II |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential |
| ENGR-1113 | Engineering |
| ENGR-2113 | ECE Mathe |
| ENGR-2123 | ECE Mathe |
|  |  |
| 8 HOURS SCIENCE |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |

29 HOURS ENGINEERING AND COMPUTER SCIENCE
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 23 HOURS COMPUTER ENGINEERING

| CENG-3113 | Data Communications |
| :--- | :--- |
| CENG-3203 | Intro to Microprocessors |
| CENG-3213 | Computer Systems |
| CENG-4113 | Software and Network Engineering* |
| CENG-4223 | Embedded Systems Design* |
| CENG-4732 | Systems Design I |
| CENG-4743 | Systems Design II |
| CENG-4753 | Systems Design III |

## 10 HOURS ELECTRICAL ENGINEERING

| ELEC-3504 | Signals and Systems |
| :--- | :--- |
| ELEC-3523 | Digital Signal Processing |
| ELEC-4523 | Software Engineering of Real-Time Systems* |


graduate tourse work 9 hndergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 6 HOURS
ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts


PHYS-2614 Physics II
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.C.E. DEGREE IN COMP. ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DEGREE W/ SOFTWARE ENG. EMPHASIS 85 UG HRS, 30 GRADUATE HRS

The undergraduate Computer Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.C.E. degree with software engineering emphasis, see page 67.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

24 HOURS MATHEMATICS
MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
MATH-3013 Differential Equations
ENGR-1113 Engineering Mathematics
ENGR-2113 ECE Mathematics I
ENGR-2123 ECE Mathematics II
8 HOURS SCIENCE
PHYS-2514 Physics I
PHYS-2614 Physics II
29 HOURS ENGINEERING AND COMPUTER SCIENCE
CMSC-1113 Programming I
CMSC-1123 Programming II
CMSC-2133 Object-Oriented Programming
CMSC-4413 Operating Systems
ENGR-1111 Introduction to Engineering
ENGR-1122 Engineering Computing
ENGR-1242 Engineering Fundamentals
ENGR-2544 Introduction to Digital Systems
ENGR-2614 Electrical Circuit Analysis
ENGR-2700 Christian Engineer Seminar
ENGR-3213 Engineering Economics
ENGR-4701 Senior Engineering Seminar

## 23 HOURS COMPUTER ENGINEERING

CENG-3113 Data Communications
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems
CENG-4113 Software and Network Engineering*
CENG-4223 Embedded Systems Design*
CENG-4732 Systems Design I
CENG-4743 Systems Design II
CENG-4753 Systems Design III
10 HOURS ELECTRICAL ENGINEERING
ELEC-3504 Signals and Systems
ELEC-3523 Digital Signal Processing
ELEC-4523 Software Engineering of Real-Time Systems*

| M.S.E. Degree Requirements: |  |
| :--- | :--- |
| 12 HOURS ENGINEERING FOUNDATION STUDIES |  |
| ENGR-5003 | Foundations of Technology Ethics and Values |
| ENGR-5113 | Random Variables and Stochastic |
|  | Processes (or a 5000-level MATH course) |
| ENGR-5203 | Systems Engineering |
| ENGR-5223 | Systems Engineering Management |

6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF COMPUTER ENGINEERING ELECTIVES
CENG-5013 HDL Design of Microprocessors
CENG-5113 Software and Network Engineering
CENG-5223 Embedded Systems Design
CENG-5233 Advanced Computer Architecture
CMSC-5613 Object-Oriented Software Engineering
CMSC-5623 Software Engineering for Trustworthy Software
ELEC-5113 Communications Systems
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ELEC-5383 Power System Analysis
ELEC-5393 Power System Protection
ENGR-5103 Innovation and Invention
3 HOURS OF SOFTWARE ENGINEERING
ENGR-5033 Software Systems Engineering
3 HOURS OF CAPSTONE
ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.C.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 6 HOURS

ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

| BIBL-2302 | Story of the New Testament | HIST-1223 | Turning Points in U.S. History |
| :---: | :---: | :---: | :---: |
| BIBLE ELECTIVE, 5 HOURS <br> 5 hours of Bible courses, except Missions Experience |  | GREAT WORKS, 3 HOURS should include literature |  |
|  |  |  |  |
|  |  | ARTS-2013 | Survey of Visual Culture |
|  |  | ARTS-2423 | History of Photography and |
| CAPSTONE, 3 HOURS <br> $\begin{array}{ll}\text { BIBL-4523 } & \begin{array}{l}\text { Capstone: Christ and His } \\ \text { World }\end{array}\end{array}$ |  |  | Motion Pictures |
|  |  | COMM-2023 | History of Theater |
|  |  | ENGL-2213 | Perspectives in Literature |
|  |  | MUSC-2013 | Music Appreciation |
| POLITICAL SCIENCE, 3 HOURS <br> POLS-2113 Introduction to American Government |  | MUSC-3213 | Perspectives in World Music |
|  |  |  |  |
|  |  | SCIENCE, 6 H | OURS |
|  |  | used in major |  |
|  |  | PHYS-2514 | Physics I |

PHYS-2614 Physics II
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE, 3 HOURS 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELECTRICAL ENGINEERING \& M.S.E. DEGREE IN COMPUTER ENGINEERING 85 UG HOURS, 30 GRADUATE HOURS

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.E.E. degree, see page 68.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.


HOURS COMPUTER ENGINEERING REQUIRED
CENG-3203 Intro to Microprocessors

6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5303 HDL Design of Microprocessors

ELCD 523

ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF COMPUTER ENGINEERING ELECTIVES
CENG-5013 HDL Design of Microprocessors
Sotware Systems Engineering
CENG-5223 Embedded Systems Design
CENG-5233 Advanced Computer Architecture
3 HOURS OF ENGINEERING ELECTIVES CHOSEN FROM
NG, ELEC courses

3 HOURS OF CAPSTONE
M.S.E. Capstone
graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
```


## COMMUNICATION, 6 HOURS

NGL-113 English Composition
SENG 4753 mysto

SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
Geometry
REQUIRED BIBLE, 8 HOURS
$\begin{array}{ll}\text { BIBL-1312 } & \text { Life of the Early Church: Acts } \\ \text { BIBL-2202 } & \text { Story of the Old Testament }\end{array}$

## BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523
$\begin{aligned} & \text { Capstone: Christ and His } \\ & \text { World }\end{aligned}$
POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in majio |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELECTRICAL ENGINEERING \& M.S.E. DECREE IN ELECTRICAL ENGINEERING 85 UG HRS, 30 GRADUATE HR

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.E.E. degree, see page 68.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.

| 24 HOURS MATHEMATICS |  |
| :--- | :--- |
| MATH-2114 | Calculus I with Analytical Geometry |
| MATH-2214 | Calculus II with Analytical Geometry |
| MATH-2314 | Calculus III |
| MATH-3013 | Differential Equations |
| ENGR-1113 | Engineering Mathematics |
| ENGR-2113 | ECE Mathematics I |
| ENGR-2123 | ECE Mathematics II |
|  |  |
| 8 HOURS SCIENCE |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics II |
|  |  |
| 20 HOURS ENGINEERING AND COMPUTER SCIENCE |  |
| CMSC-1113 | Programming I |
| ENGR-1111 | Introduction to Engineering |
| ENGR-1122 | Engineering Computing |
| ENGR-1242 | Engineering Fundamentals |
| ENGR-2544 | Introduction to Digital Systems |
| ENGR-2614 | Electrical Circuit Analysis |
| ENGR-2700 | Christian Engineer Seminar |
| ENGR-3213 | Engineering Economics |
| ENGR-4701 | Senior Engineering Seminar |

3 HOURS ELECTIVE ENGINEERING AND COMPUTER SCIENCE
CMSC-1123 Programming II

ENGR-2433 Thermodynamics
27 HOURS ELECTRICAL ENGINEERING
ELEC-3303 Analog Electronics
ELEC-3313 Electronic Devices
ELEC-3504 Signals and Systems
ELEC-3523 Digital Signal Processing
ELEC-3613 Electromagnetic Fields
ELEC-4113 Communications Systems*
ELEC-4732 Systems Design I
ELEC-4743 Systems Design II
ELEC-4753 Systems Design III
6 HOURS COMPUTER ENGINEERING REQUIRED
CENG-3203 Intro to Microprocessors
CENG-3213 Computer Systems

| 6 HOURS ELECTRICAL ENGINEERING ELECTIVES |  |
| :--- | :--- |
| ELEC-4323 | Semiconductor Devices* |
| ELEC-4423 | Control Systems* |
| ELEC-4523 | Software Engineering of Real-Time Systems* |

M.S.E. Degree Requirements:

12 HOURS ENGINEERING FOUNDATION STUDIES
ENGR-5003 Foundations of Technology Ethics and Values
ENGR-5113 Random Variables and Stochastic Processes (or a
5000 -level MATH course)
ENGR-5203 Systems Engineering
ENGR-5223 Systems Engineering Management
6 HOURS OF ELECTRICAL AND COMPUTER ENGINEERING ELECTIVES
CENG-5113 Software and Network Engineering
CENG-5233 Advanced Computer Architecture
CENG-5303 HDL Design of Microprocessors
ELEC-5323 Semiconductor Devices
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
ENGR-5213 Tools of Operations Research
ENGR-5323 Failure Analysis of Engineering Systems
6 HOURS OF ELECTRICAL ENGINEERING ELECTIVES
ELEC-5113 Communications Systems
ELEC-5323 Semiconductor Devices
ELEC-5383 Power System Analysis
ELEC-5393 Power System Protection
ELEC-5423 Control Systems
ELEC-5523 Software Engineering of Real-Time Systems
3 HOURS OF ENGINEERING ELECTIVES CHOSEN FROM
CENG Courses
ELEC Courses
ENGR-5103 Innovation and Invention
3 HOURS OF CAPSTONE
ENGR-5793 M.S.E. Capstone
*Up to 9 hours of these undergraduate requirements should be satisfied by graduate course work.

## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 6 HOUR

ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

## BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience
CAPSTONE, 3 HOURS
CapL-4523

Capstone: Christ and His
World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELIECTRICAL ENG \& M.S.E. DEGREE W/ SOFTWARE ENG. EMPHASIS 85 UG HOURS, 30 GRADUATE HOURS

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
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For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.


COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

| Capstone: Christ and His |
| :--- |
| BIBL-4523 |
| World |


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  |

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography and Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS
used in major
PHYS-2514 Physics

PHYS-2614 Physics I
PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE
3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science,
Psychology, or Spanish
LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELECTRICAL ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DEGREE IN COMPUTER ENG. 85 UG HRS, 30 GRADUATE HRS

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes B.S.E.E. for the degree with software engineering emphasis, see page 69.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.


## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 6 HOURS

ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical Geometry

```
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
```

BIBL-2302 Story of the New Testament


| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELEC. ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DECREE IN ELECTRICAL ENG. 85 UG HRS, 30 GRADUATE HRS

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org. For program description and learning outcomes for the B.S.E.E. degree with software engineering emphasis, see page 69.
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
Student must complete a minimum of 126 hours including the major and core to complete the bachelor degree. Elective hours may be needed to reach 126 hours.


## UNIVERSITY CORE CURRICULUM: <br> B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

```
COMMUNICATION, 6 HOURS
ENGL-1113 English Composition I
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
```

COMMUNICATION, 6 HOURS
Systems use in maior Composition
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
used in major
MA
Geometry

## REQUIRED BIBLE, 8 HOURS

Libl-1212 B of Christ: Matthew

BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS

| CIBL-4523 | Capstone: Christ and His |
| :--- | :--- |
| World |  |


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  |


| AMERICAN | HISTORY, 3 HOURS |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |


| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 | HOURS |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE
3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science
Psychology, or Spanish
LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E.E. DEGREE IN ELEC. ENG. W/ SOFTWARE ENG EMPHASIS \& M.S.E. DEGREE W/ SOFTWARE ENG EMPHASIS 85 UG HRS, 30 GRADUATE HRS

The undergraduate Electrical Engineering program is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.
For program description and learning outcomes for the B.S.E.E. degree with software engineering emphasis, see page 69 .
For program description and learning outcomes for the M.S.E. degree, please refer to the graduate catalog.
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UNIVERSITY CORE CURRICULUM:
B.S.E.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 6 HOURS
ENGL-1113 English Composition
Systems used in major
CENG-4753 Systems Design III
SPEECH, 3 HOURS
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-2114 Calculus I with Analytical
Geometry

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old Testament

## BIBL-2302 Story of the New Testamen

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Governmen

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

| GREAT WORKS, 3 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography and |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| SCIENCE, 6 HOURS |  |
| used in major |  |
| PHYS-2514 | Physics I |
| PHYS-2614 | Physics I |

PSYCHOLOGY, SOCIAL SCIENCES, FINE ARTS OR FOREIGN LANGUAGE 3 hours from the departments: Fine Arts, Family Science, French, German, History, Japanese, Music, Political Science, Psychology, or Spanish

LIBERAL ARTS, 9 HOURS
used in major
9 hours from Math and Physics
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

MINOR REQUREMENTS - COLLEGE OF ENGINEERING \& COMPUTER SCIENCE

## COMPUTER SCIENCE

COMPUTER SCIENCE MINOR 18 HOURS
12 HOURS REQUIRED
CMSC-1113
Programming I
CMSC-1123
Programming II
CMSC-2133 Object Oriented Programming
CMSC-2233
Data Structures and Algorithm Analysis
6 HOURS MAY BE CHOSEN FROM
Computer Science courses
3 hours must be numbered 3000 or above.
SOFTWARE ENGINEERING MINOR 18 HOURS 18 HOURS REQUIRED
CMSC-1113
CMSC-1123
CMSC-1313
CMSC-2213
CMSC-2313
CMSC-3313
Programming I
Programming II
Software Engineering I-Introduction
Internet Application Development
Software Engineering II Practices
Software Engineer III-Ethics

## ENGINEERING

ENGINEERING MINOR 18 HOURS
8 HOURS REQUIRED
PHYS-2514 Physics I
MATH-2114 Calculus I with Analytical Geometry
10 HOURS CHOSEN FROM
Engineering Science, Computer Engineering, Electrical Engineering, or Mechanical Engineering courses.

## MATHEMATICS

## MATHEMATICS MINOR 18 HOURS

Mathematics, including at least 6 hours numbered 3000 or above.

COLLEGE OF LIBERAL ARTS

Department of Art \& Design
Department of Communication
Department of Criminal Justice
Department of History \& Political Science Department of Interdisciplinary Studies Department of Language \& Literature Department of Music
Department of Psychology \& Family Science School of Education

## DEPARTMENT OF

ART \& DESIGN

## AREAS OF STUDY

Communication Design (ARTS)
Fine Arts (ARTS)
Gaming and Animation (ARTS)
Interior Architecture (ARTS)

## DEGREES OFFERED

B.A. Degree in Gaming and Animation
B.A. Degree in Visual Art, Art Concentration
B.F.A. Degree in Art
B.F.A. Degree in Communication Design
B.F.A. Degree in Digital Art
B.F.A. Degree in Gaming and Animation
B.F.A. Degree in Interior Architecture
B.S. Degree in Communication Design

## MINORS

Art
Communication Design
Interior Architecture

FACULTY
Amy Beauchamp, M.F.A., Assistant Professor of Art and Design
David Crismon, M.F.A., Professor of Art and Design
Michael J. O'Keefe, M.F.A., Professor of Art and Design
Jeff Price, M.F.A., Department Chair of Art \& Design, Professor of Art and Design

LOCATION
Garvey Center for the Liberal Arts
Kresge Fine Arts

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

## DEAN'S OFFICE

GC 121A

SPECIAL NOTES FOR ART AND DESIGN MAJORS:

1. You must provide your own supplies, including some software.
2. For each art and design course you take, OC reserves the right to retain one of your works for its permanent collection and to exhibit or reproduce the work in any of its publications.
3. If an M.A. in Art History is anticipated, two courses in a foreign language and an additional 9 hours of art history are highly recommended.

## B.A. DEGREE IN GAMING AND ANIMATION 51 HOURS, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

This major is for the person wanting a general background in art or a vocation in the field of art and its related industries.
An OC graduate with a Bachelor of Arts degree in Gaming and Animation will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate the ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| 18 HOURS FOUNDATION | ARTS-3163 | Animation Principles |  |
| ARTS-1103 | Technology for Graphics | ARTS-3173 | 3D Modeling and Animation II |
| ARTS-1113 | Fundamentals of Drawing | ARTS-3383 | Motion Imagery |
| ARTS-1213 | Figure Drawing | ARTS-3453 | Team Game Production I |
| ARTS-2143 | Digital Painting | ARTS-4223 | Gaming and Animation Studio |
| ARTS-2753 | Texturing, Rendering, and Lighting | ARTS-4333 | Commercial Studio Photography |
| ARTS-3363 | Photography I | ARTS-4663 | Gaming + Animation Capstone |
|  |  |  |  |
| 6 HOURS ART AND DESIGN HISTORY | HOURS FOREIGN LANGUAGE |  |  |
| ARTS-3333 | History of Design | Take 6 hours of the same foreign language |  |
| ARTS-3393 | Game History and Development |  |  |

## 27 HOURS GAMING AND ANIMATION

ARTS-2133 Intro to Game Technology
ARTS-2743 3D Modeling I

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

сомMUMCCatov, , hours
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

## BIBL-1212 Life of Christ: Matthew

BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS

Capstone: Christ and His World

## POLITICAL SCIENCE, 3 HOURS <br> POLS-2113 Introduction to

American Government
AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 6 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \& Motion Pictures

| COMM-2023 | History of Theater |
| :---: | :---: |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL SCIENCE, 3 HOURS |  |
|  |  |
| WESTERN CIVILIZATION, 3 HOURS |  |
| HIST-2923 | Perspectives in Western Civilization |


| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :--- | :--- |
| GEOG-2113 | Elements of Human |
| Geography |  |
| GEOG-2213 | World Regional Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3633 | New Religious Movements |
| MUSC-3213 | Perspectives in World Music |
| *For more information on how to apply study |  |
| abroad trips to the core curriculum, see the |  |
| chart on page 25. |  |

## B.A. DEGREE IN VISUAL ART, ART CONCENTRATION <br> 51 HOURS, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

This major is for the person wanting a general background in art or a vocation in the field of art and its related industries.
An OC graduate with a Bachelor of Arts degree in Visual Art with a concentration in Art will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate the ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 21 HOURS FOUNDATION

ARTS-1103 Technology for Graphics
ARTS-1113 Fundamentals of Drawing
ARTS-1213 Figure Drawing
ARTS-1413 Elements of Visual Thinking
ARTS-2223 Introduction to Communication Design
ARTS-2323 Digital Design for Print
ARTS-3773 The Business of Branding Yourself
3 HOURS ART HISTORY REQUIRED
ARTS-3343 Ancient to Modern Art History
3 HOURS ART HISTORY ELECTIVES CHOSEN FROM
ARTS-2423
ARTS-2433
ARTS-3333
ARTS-3353
ARTS-3533
ARTS-3543 Historical of Interior Design II
ARTS-3633 Contemporary Interior Design

12 HOURS ART CONCENTRATION
ARTS-2513 Painting I
ARTS-2523 Digital Sculpting
ARTS-3213 Painting II
ARTS-3523 Illustration I
12 HOURS ELECTIVES CHOSEN FROM
ARTS-2233 Typography As Visual Language
ARTS-3113 Printmaking: Intaglio and Relief
ARTS-3123 Printmaking: Serigraphy
ARTS-3363 Photography I
ARTS-4213 Open Studio
ARTS-4523 Illustration II
6 HOURS FOREIGN LANGUAGE
Take 6 hours of the same foreign language

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 6 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \& Motion Pictures

| COMM-2023 | History of Theater |
| :---: | :---: |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I |  |
| WESTERN CIVILIZATION, 3 HOURS |  |
| HIST-2923 | Perspectives in Western |

NON-WESTERN CIVILIZATION, 3 HOURS GEOG-2213 World Regional Geography GEOG-2113 Elements of Human Geography HIST-2613 The Modern Middle East MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious Movements
MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.F.A. DEGREE IN ART 69 HOURS

This major is for the person wanting a general background in art or a vocation in the field of art and its related industries.
An OC graduate with a Bachelor of Fine Arts degree in Art will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate an ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 30 HOURS FOUNDATION |  | ARTS-2223 | Introduction to Communication Design |
| :---: | :---: | :---: | :---: |
| ARTS-1103 | Technology for Graphics | ARTS-2233 | Type As Visual Language |
| ARTS-1113 | Fundamentals of Drawing | ARTS-3243 | Graphic Design |
| ARTS-1213 | Figure Drawing | 15 HOURS ART AND DESIGN ELECTIVES CHOSEN FROM |  |
| ARTS-1413 | Elements of Visual Thinking |  |  |
| ARTS-2323 | Digital Design for Print | ARTS-2143 | Digital Painting |
| ARTS-2423 | History of Photography and Motion Pictures | ARTS-2423 | Interactive Media Design I |
| ARTS-3333 | History of Design | ARTS-3113 | Printmaking: Intaglio and Relief |
| ARTS-3343 | Ancient to Modern Art History | ARTS-3123 | Printmaking: Serigraphy |
| ARTS-3353 | Contemporary Art | ARTS-3253 | Print + Social Media Design |
| ARTS-3773 | The Business of Branding Yourself | ARTS-3263 | Advanced Graphic Design |
|  |  | ARTS-3363 | Photography I |
| 9 HOURS PAINTING |  | ARTS-4253 | Integrated Marketing Design |
| ARTS-2513 | Painting I | ARTS-4333 | Commercial Studio Photography |
| ARTS-3213 | Painting II | ARTS-4643* | Senior Exhibit |
| ARTS-4213 | Open Studio | ARTS-4830* | Art Internship |
|  |  | *Only with advisor's approval. |  |
| 6 HOURS ILLUSTRATION |  |  |  |
| ARTS-3523 | Illustration I | Six credit hou | eign Language is strongley encouraged if the student |
| ARTS-4523 | Illustration II | is pursuing a Language c | degree in Art History. The six credit hours of Foreign ied toward the 15 hours of electives. |

9 HOURS PROFESSIONAL DESIGN

## UNIVERSITY CORE CURRICULUM: <br> B.F.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience.
CAPSTONE, 3 HOURS
CIBL-4523
Capstone: Christ and His
World

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
used in major
ARTS-2423 History of Photography \&
ARTS-3343 Ancient to Modern Art History ARTS-3353 Contemporary Art

SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

## LIBERAL ARTS, 9 HOURS

9 hours from any Liberal Arts except Art: Communication, English, Family Science, Foreign Language, History, Math, Music, Political Science, Psychology, Science.
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.F.A. DEGREE IN COMMUNICATION DESIGN <br> 72 HOURS

This major is for the person wanting to be an animator, game designer, art director, graphic designer, web designer, account executive, or copywriter for an advertising agency, graphic design studio, "in-house" corporate art department, or interactive design company.

An OC graduate with a Bachelor of Fine Arts degree in Communication Design will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate an ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 15 HOURS FOUNDATION | 15 HOURS CHOSEN FROM |  |  |
| :--- | :--- | :--- | :--- |
| ARTS-1113 | Fundamentals of Drawing | ARTS-2513 | Painting I |
| ARTS-1213 | Figure Drawing | ARTS-2743 | 3-D Modeling I |
| ARTS-1413 | Elements of Visual Thinking | ARTS-3113 | Printmaking: Intaglio and Relief |
| ARTS-3343 | Ancient to Modern Art History | ARTS-3123 | Printmaking: Serigraphy |
| ARTS-3773 | The Business of Branding Yourself | ARTS-3163 | Animation Principles |
|  | Concentration | ARTS-3173 | 3D Modeling and Animation II |
|  |  | ARTS-3213 | Painting II |
| 30 HOURS COMMUNICATION DESIGN | ARTS-3353 | Contemporary Art |  |
| ARTS-2223 | Introduction to Communication Design | ARTS-3363 | Photography I |
| ARTS-2233 | Type as Visual Language | ARTS-3383 | Motion Imagery |
| ARTS-3243 | Graphic Design | ARTS-4213 | Open Studio |
| ARTS-3253 | Print and Social Media Design | ARTS-4223 | Gaming and Animation Studio |
| ARTS-3263 | Advanced Graphic Design | COMM-2413 | Photographic Principles and Practices |
| ARTS-3333 | History of Design | COMM-2643 | Media Production |
| ARTS-3513 | Graphic Arts Production | COMM-3633 | Audio for Media |
| ARTS-3523 | IIlustration I | COMM-3653 | Field Production and Editing |
| ARTS-4253 | Integrated Marketing Design | COMM-3703 | Motion Graphics |
| ARTS-4523 | Illustration II | COMM-4763 | Advanced Media Production |
| 12 HOURS DIGITAL |  |  |  |
| ARTS-1103 | DESIGN |  |  |
| ARTS-2243 | Internology for Graphics |  |  |
| ARTS-2323 | Digital Design for Print |  |  |
| ARTS-3443 | Interactive Media Design II |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.F.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience.

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
used in major
ARTS-2423 History of Photography \& Motion Pictures
ARTS-3343 Ancient to Modern Art History ARTS-3353 Contemporary Art

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I

## B.F.A. DEGREE IN DIGITAL ART <br> 72 HOURS

This major is for the person wanting a general background in art or a vocation in the field of art and its related industries.
An OC graduate with a Bachelor of Fine Arts degree in Digital Art will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate an ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 12 HOURS FOUNDATION |  |
| :--- | :--- |
| ARTS-1103 | Technology for Graphics |
| ARTS-1113 | Fundamentals of Drawing |
| ARTS-1213 | Figure Drawing |
| ARTS-1413 | Elements of Visual Thinking |
|  |  |
| 18 HOURS FINE ARTS |  |
| ARTS-2143 |  |
| ARTS-2513 | Digital Painting |
| ARTS-3213 | Painting I |
| ARTS-3363 | Photography I |
| ARTS-4213 | Open Studio |
| ARTS-4333 | Commercial Studio Photography |

## 12 HOURS GAMING AND ANIMATION

ARTS-2523 Digital Sculpting
ARTS-2743 3D Modeling I
ARTS-4223 Gaming and Animation Studio
ARTS-4663 Gaming + Animation Capstone

## 9 HOURS COMMUNICATION DESIGN <br> ARTS-3523 Illustration I <br> ARTS-3773 The Business of Branding Yourself <br> ARTS-4523 Illustration II <br> 15 HOURS ART/DESIGN/GAME HISTORY <br> ARTS-2423 <br> History of Photography and Motion Pictures <br> ARTS-3333 History of Design <br> ARTS-3343 Ancient to Modern Art History <br> ARTS-3353 Contemporary Art <br> ARTS-3393 Game History and Development <br> 6 HOURS ART AND DESIGN ELECTIVES <br> Take 6 hours in Art and Design Department not previously taken.

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience.

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government

GREAT WORKS, 3 HOURS
used in major
ARTS-2423 History of Photography \& Motion Pictures
ARTS-3343 Ancient to Modern Art History ARTS-3353 Contemporary Art SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts except Art:
Communication, English, Family Science,
Foreign Language, History, Math, Music, Political Science, Psychology, Science.
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.F.A. DEGREE IN GAMING AND ANIMATION <br> 72 HOURS

The Bachelor of Fine Arts in Gaming and Animation prepares students to use emerging media for the purpose of game design, self-expression, and experimentation. Gaming and Animation students will have a grasp of industry-level skills and artistic techniques including texturing, uv mapping, animating and rigging 3D models, game level design, 2 D animation techniques, audio production, and interactive design.

An OC graduate with a Bachelor of Fine Arts in Gaming and Animation will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate an ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| 24 HOURS FOUNDATION | ARTS-2743 | 3D Modeling I |  |
| ARTS-1103 | Technology for Graphics | ARTS-3163 | Animation Principles |
| ARTS-1113 | Fundamentals of Drawing | ARTS-3173 | 3D Modeling and Animation II |
| ARTS-1213 | Figure Drawing | ARTS-3363 | Photography I |
| ARTS-1413 | Elements of Visual Thinking | ARTS-3383 | Motion Imagery |
| ARTS-2133 | Intro to Game Technology | ARTS-3423 | History of Animation |
| ARTS-2143 | Digital Painting | ARTS-3453 | Team Game Production I |
| ARTS-2523 | Digital Sculpting | ARTS-4223 | Gaming and Animation Studio |
| ARTS 2753 | Texturing, Rendering, and Lighting | ARTS-4333 | Commercial Studio Photography |
|  |  | ARTS-4663 | Gaming + Animation Capstone |
| 12 HOURS ART AND DESIGN HISTORY |  |  |  |
| ARTS-2423 | History of Photography and Motion Pictures | 3 HOURS MANAGEMENT |  |
| ARTS-3333 | History of Design | MGMT-3323 | Entrepreneurship and Small Business Management |
| ARTS-3353 | Contemporary Art |  |  |
| ARTS-3393 | Game History and Development |  |  |
|  |  |  |  |
| 33 HOURS GAMING AND ANIMATION |  |  |  |
| ARTS-2243 | Interactive Media Design I |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.F.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience.

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

used in major
ARTS-2423 History of Photography \& Motion Pictures
ARTS-3343 Ancient to Modern Art History ARTS-3353 Contemporary Art

SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts except Art: Communication, English, Family Science, Foreign Language, History, Math, Music, Political Science, Psychology, Science.
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.F.A. DEGREE IN INTERIOR ARCHITECTURE <br> 72 HOURS

This major is for persons wanting a career in residential or commercial interior architecture or a specialty design area.
An OC graduate with a Bachelor of Fine Arts degree in Interior Architecture will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate an ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 6 HOURS FOUNDATION |  | ARTS-2663 | Architectural Graphics |
| :---: | :---: | :---: | :---: |
| ARTS-1113 | Fundamentals of Drawing | ARTS-2743 | 3D Modeling I |
| ARTS-1413 | Elements of Visual Thinking | ARTS-3533 | Historical Interior Design I |
|  |  | ARTS-3543 | Historical Interior Design II |
| 3 HOURS ART HISTORY CHOSEN FROM |  | ARTS-3613 | Interior Systems |
| ARTS-3333 | History of Design | ARTS-3623 | Commercial Design I |
| ARTS-3343 | Ancient to Modern Art History | ARTS-3633 | Contemporary Interior Design |
| ARTS-3353 | Contemporary Art | ARTS-3643 | Commercial Design II |
| 54 HOURS INTERIOR ARCHITECTURE |  | ARTS-4613 | Interior Design Professional Practices and Portfolio |
| ARTS-1103 | Technology for Graphics | ARTS-4633 | Senior Interior Design Studio |
| ARTS-1623 | Introduction to Interior Design | 3 HOURS INT | RCHITECTURE INTERNSHIP |
| ARTS-1643 | Interior Textiles, Materials, and Finishes | ARTS-4823 | Interior Design Internship |
| ARTS-1653 | Computer Aided Design |  | - |
| ARTS-2123 | Rendering in Perspective | 6 HOURS BU | CHOSEN FROM |
| ARTS-2443 | Construction Materials and Details | Upper Level | Courses as approved by Advisor |
| ARTS-2623 | Residential Interior Design |  |  |
| ARTS-2653 | Space Planning and Codes |  |  |

## UNIVERSITY CORE CURRICULUM: B.F.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience.

| CAPSTONE, 3 HOURS |
| :--- |
| BIBL-4523 |
| Capstone: Christ and His |
| World |


| POLITICAL | SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 | Introduction to |
| American Government |  |


| AMERICAN | HISTORY, 3 HOURS |
| :--- | :--- |
| HIST-1223 | Turning Points in U.S. History |

## GREAT WORKS, 3 HOURS

used in major
ARTS-2423 History of Photography \&
Motion Pictures
ARTS-3343 Ancient to Modern Art History
ARTS-3353 Contemporary Art
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I

LIBERAL ARTS, 9 HOURS
9 hours from any Liberal Arts except Art: Communication, English, Family Science, Foreign Language, History, Math, Music, Political Science, Psychology, Science.
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN COMMUNICATION DESIGN <br> 70 HOURS, MARKETING MINOR INCLUDED

This major is for the person wanting a general background in art or a vocation in the field of art and its related industries.
An OC graduate with a Bachelor of Science degree in Communication Design with a Marketing minor will:

1. Demonstrate a commitment to scholarship, creative expression, and independent thought.
2. Demonstrate effective visual problem solving skills.
3. Produce an organized, coherent body of work and critically defend it.
4. Demonstrate a working understanding of art/design history, genres, movements, and practitioners.
5. Demonstrate an understanding of the role of faith in his or her personal creative expression.
6. Analyze and respond to personal experience, professional standards, ethics, and global perspectives.
7. Demonstrate the ability to critically evaluate peer and professional work in his or her discipline.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 9 HOURS FOUNDATION

ARTS-1113 Fundamentals of Drawing
ARTS-1413 Elements of Visual Thinking
ARTS-3773 The Business of Branding Yourself
30 HOURS COMMUNICATION DESIGN
ARTS-2223 Introduction to Communication Design
ARTS-2233 Type as Visual Language
ARTS-3243 Graphic Design
ARTS-3253 Print and Social Media Design
ARTS-3263 Advanced Graphic Design
ARTS-3333 History of Design
ARTS-3513 Graphic Arts Production
ARTS-3523 Illustration I
ARTS-4253 Integrated Marketing Design
ARTS-4523 Illustration II

## 12 HOURS DIGITAL DESIGN

ARTS-1103 Technology for Graphics
ARTS-2243 Interactive Media Design I
ARTS-2323 Digital Design for Print
ARTS-3443 Interactive Media Design II

## 19 HOURS MARKETING MINOR

 13 HOURS BUSINESS COREACCT-2113 Accounting Principles I
BUSA-1211 Introduction to Business
ECON-2113 Macroeconomic Principles
MGMT-3113 Principles of Management
MKTG-3313 Principles of Marketing
6 HOURS MARKETING CHOSEN FROM
MKTG-3413 Consumer Behavior
MKTG-3513 Electronic Commerce and Online Marketing
MKTG-3713 Sales Management and the Sales Process
MKTG-4313 Promotional Strategies

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New
Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

| CAPSTONE, 3 HOURS <br> BIBL-4523 <br> Capstone: Christ and His <br> World |  |
| :--- | :--- |
| WOLITICAL |  |
| SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
| American Government |  |

\(\left.$$
\begin{array}{llll}\text { MUSC-3213 } & \begin{array}{l}\text { Perspectives in World } \\
\text { Music }\end{array} & \begin{array}{l}\text { NON-WESTERN CIVILIZATION, 3 HOURS } \\
\text { GEOG-2113 }\end{array}
$$ <br>

Elements of Human\end{array}\right]\)| Geography |
| :--- |

## DEPARTMENT OF

## COMMUNICATION

## AREAS OF STUDY

Communication (COMM)

## DEGREES OFFERED

B.A. Degree in Public Communication and Leadership
B.S. Degree in Journalism
B.S. Degree in Mass Communication, Electronic Media/Creative Media
B.S. Degree in Mass Communication, Electronic Media/Interactive Media
B.S. Degree in Mass Communication, Electronic Media/Media Management
B.S. Degree in Mass Communication-Public Relations
B.S. Degree in Public Communication and Leadership
B.S. Degree in Public Communication with Theater Emphasis

## MINORS

Communication Studies
Drama Ministry
Dramaturgy
Interactive Media
Leadership
Mass Communication
Media Production
Theater Performance

FACULTY
David Jurney, M.B.A., Instructor of Communication
Larry Jurney, Ph.D., Chair of Interdisciplinary Studies Professor of Mass Communication
David Lowry, Ph.D., Professor of Communication
Philip Patterson, Ph.D., Distinguished Professor of Communication
Brian Simmons, Ph.D., Department Chair of Communication, Professor of Communication and Honors
Josh Watson, M.A., Assistant Professor of Communication

## LOCATION

Garvey Center for the Liberal Arts
Mabee Communication Wing
DEAN
Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC-121

## B.A. DEGREE IN PUBLIC COMMUNICATION AND LEADERSHIP 43 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

An OC graduate with a Bachelor of Arts degree in Public Communication and Leadership will:

1. Learn a variety of theories related to communication and leadership and will learn how to apply those theories in praxis.
2. Learn a variety of communicative and leadership skills and techniques for the management of interpersonal relations, group leadership, and social media.
3. Explore ethical approaches to communication leadership from a Christian faith perspective.
4. Learn ethical persuasive techniques grounded in Christian faith to help them become skillful advocates for important social issues.
5. Learn how to plan, host, and conduct public forums for issues of public importance and controversial issues.
6. Learn peacemaking and conflict management skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 25 HOURS COMMUNICATION FOUNDATION COURSES |  | COMM-3723 | Interviewing |
| :--- | :--- | :--- | :--- |
| COMM-2003 | Effective Leadership | COMM-4633 | Intercultural Communication |
| COMM-2113 | Writing For Media | COMM-4813 | Special Studies: Guest Speakers |
| COMM-2513 | Communication Theory | COMM-4963 | Intern Experience |
| COMM-3003 | Family Communication and Leadership |  |  |
| COMM-3243 | Planning, Organizing, and Leading Events | HOURS CHOSEN FROM |  |
| COMM-3333 | Team Communication and Leadership | BUSA-3213 | Business Law |
| COMM-3353 | Interpersonal Communication | COMM-4713 | Media Law |
| COMM-4631 | Senior Seminar in Communication | POLS-4113 | Constitutional Law |
| COMM-4733 | Communication Ethics |  |  |
|  |  | THOURS FOREIGN LANGUAGE |  |
| 9 HOURS COMMUNICATION LEADERSHIP | Take 6 hours of the same foreign language |  |  |
| COMM-3233 | Managing Social Media | SUGGESTED MINORS: |  |
| COMM-4113 | Persuasion and Advocacy | Business |  |
| COMM-4523 | Conflict Resolution and Negotiation | Political Science |  |

## 6 HOURS CHOSEN FROM

COMM-3323 Organizational Communication
COMM-3413 Argumentation and Debate

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
| American Government |  |
| AMERICAN | STORY, 3 HOURS |
| HIST-1223 | Turning Points in U.S. History |
| GREAT WORKS, 6 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |

ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human
GEOG-2213 $\begin{aligned} & \text { Geography } \\ & \text { World Regional Geography }\end{aligned}$
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN JOURNALISM 39 HOURS, MINOR REQUIRED

An OC graduate with a Bachelor of Science degree in Journalism will:

1. Have been encouraged to sustain or adopt a Christian worldview characterized by participation in a Christian community.
2. Have been encouraged to balance career, family, church, and community successfully.
3. Be familiar with appropriate theories of communication.
4. Have developed the appropriate writing styles and skills expected by future employers or graduate programs.
5. Have an understanding of the fundamentals of research and be able to interpret research findings.
6. Understand the ethics of communication.
7. Be able to pursue successfully a career in the converged world of journalism as a reporter, producer, or editor characterized by the ability to acquire, process, and distribute newsworthy stories in formats appropriate for print, broadcast, or web.
8. Operate within legal frameworks and guidelines of media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

10 HOURS MASS COMMUNICATION FOUNDATION
COMM-2613 Media, Faith, and Culture
COMM-4631 Senior Seminar in Communication
COMM-4713 Media Law
COMM-4723 Media Ethics
5 HOURS EXPERIENCE: YOU MUST CHOOSE FROM
COMM-1371 and COMM-3351 or after completing 3 hours of experience may take COMM-4821 with permission

| 15 HOURS JOURNALISM FOUNDATION |  |
| :--- | :--- |
| COMM-2113 | Writing For Media |
| COMM 2643 | Media Production |
| COMM-2833 | Reporting |
| COMM-3453 | Electronic News Writing |
| COMM-3723 | Interviewing |

COMM-3723 Interviewing
3 HOURS JOURNALISM REQUIRED CHOSEN FROM
COMM-3823 Feature Writing**
COMM-4123 Electronic News Producing*
3 HOURS COMMUNICATION CHOSEN FROM
COMM-2213 Voice and Articulation*
COMM-2413 Photography-Principles and Practices**

3 HOURS CHOSEN FROM EITHER
ADVANCED WRITING**
ENGL-3493 Technical Writing
ENGL-3523 Creative Writing I
ENGL-3533 Creative Writing II
ENGL-3813 Advanced Writing
ADVANCED PRODUCTION*
COMM-3653 Production and Editing
SUGGESTED MINORS:
Accounting
Business
Education
Media Production (for all wanting a broadcast emphasis)
Physical Science
Political Science
*Students with primary interest in broadcast and web choose these classes.
**Students with primary interest in print and web choose these classes.

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS |  |
| appropriate to major |  |
|  |  |
| REQUIRED BIBLE, 8 HOURS <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old <br>  Testament <br> BIBL-2302 Story of the New <br>  Testament <br> BIBLE ELECTIVE, 5 HOURS  <br> 5 hours of Bible courses, except Missions  <br> Experience $l$ |  |


| CAPSTONE, |  |
| :--- | :--- |
| BIBL-4523 | HOURS |
| Capstone: Christ and His |  |
| World |  |

POLITICAL

| ENGL-2213 | Perspectives in Literature |
| :--- | :--- |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World <br> Music |
| SCIENCE, 6 HOURS |  |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  |
| BEHAVIORAL SCIENCE, 3 HOURS |  |
| PSYC-1113 | General Psychology I |
| GREAT WORKS, ADDITIONAL, 3 HOURS |  |
| Choose 3 hours from list on the left |  |
| WESTERN CIVILIZATION, 3 HOURS |  |
| HIST-2923 | Perspectives in Western |
| Civilization |  |


| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: |
| GEOG-2113 | Elements of Human |
|  | Geography |
| GEOG-2213 | World Regional |
|  | Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious |
|  | Movements |
| MUSC-3213 | Perspectives in World Music |
| LIBERAL ARTS, 3 HOURS |  |
| outside major, as approved by your |  |
| department |  |
| *For more information on how to apply the study abroad trips to the core curriculum, see page 25 . |  |

## B.S. DEGREE IN MASS COMMUNICATION, <br> ELECTRONIC MEDIA-CREATIVE MEDIA - 56 HOURS

An OC graduate with a Bachelor of Science degree in Mass Communication Electronic Media-Creative Media (Content Creation) will:

1. Have been encouraged to sustain or adopt a Christian worldview characterized by participation in a Christian community.
2. Have been encouraged to balance career, family, church, and community successfully.
3. Be familiar with the appropriate theories of communication.
4. Have developed the appropriate writing styles and skills expected by future employers or graduate programs.
5. Have an understanding of the fundamentals of research and be able to interpret research findings.
6. Understand the ethics of communication.
7. Be able to pursue successfully a career as an independent video producer or as a member of a media team in a corporation or be able to pursue successfully graduate studies.
8. Operate within legal frameworks and guidelines of media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 10 HOURS MASS COMMUNICATION FOUNDATION |  |
| :--- | :--- |
| COMM-2613 | Media, Faith, and Culture |
| COMM-4631 | Senior Seminar in Communication |
| COMM-4713 | Media Law |
| COMM-4723 | Media Ethics |

5 HOURS EXPERIENCE:
You must take COMM-1371 or COMM-3371 each semester after completing COMM-1211. After satisfying the major requirement, additional practicum hours will count toward the 126 hours required for the degree. Internships may be substituted for two of these hours.

## 35 HOURS CREATIVE MEDIA REQUIRED

| COMM-1211 | Intro to Electronic Media |
| :--- | :--- |
| COMM-2643 | Media Production |
| COMM-2723 | Scriptwriting for TV and Movies |
| COMM-3343 | Campaigns |

COMM-3371 Advanced Workshop
COMM-3633 Audio for Media
COMM-3653 Field Production and Editing
COMM-3703 Motion Graphics
COMM-3723 Interviewing
COMM-3733 Media Marketing \& Sales
COMM-4123 Electronic News Producing (May Sub COMM-3453)
COMM-4513 Administrative Aspects of Electronic Media
COMM-4763 Advanced Media Production
6 HOURS ART REQUIRED
ARTS-1103 Technology for Graphics
COMM-3143 Basics of Visual Communication Design

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New
Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS <br> BIBL-4523 <br> Capstone: Christ and His <br> World |  |
| :--- | :--- |
| POLITICAL |  |
| POLSENCE, 3 HOURS <br> Introduction to <br> American Government |  |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. <br> History |
| GREAT WORKS, 3 HOURS |  |


| MUSC-2013 | Music Appreciation <br> MUSC-3213 <br> Perspectives in World <br> Music |
| :--- | :--- |
| SCIENCE, 6 HOURS |  |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  |
| BEHAVIORAL  <br> PSCIENCE, 3 HOURS  <br> PSYC-1113 General Psychology I |  |
| GREAT WORKS, ADDITIONAL, 3 HOURS <br> Choose 3 hours from list on the left |  |
| WESTERN CIVILIZATION, 3 HOURS <br> HIST-2923 <br> Perspectives in Western <br> Civilization |  |

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regiona
Geography
HIST-2613 The Modern Middle East
MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious
Movements
MUSC-3213 Perspectives in World Music

LIBERAL ARTS, 3 HOURS
outside major, as approved by your department
*For more information on how to apply the study abroad trips to the core curriculum, see page 25 .

## B.S. DEGREE IN MASS COMMUNICATION, ELECTRONIC MEDIA-INTERACTIVE MEDIA - 56 HOURS

An OC graduate with a Bachelor of Science degree in Mass Communication, Electronic Media-Interactive Media will:

1. Have been encouraged to sustain or adopt a Christian worldview characterized by participation in a Christian community.
2. Have been encouraged to balance career, family, church, and community successfully.
3. Be familiar with the appropriate theories of communication.
4. Have developed the appropriate writing styles and skills expected by future employers or graduate programs.
5. Have an understanding of the fundamentals of research and be able to interpret research findings.
6. Understand the ethics of communication.
7. Be able to pursue successfully a career in broadcast graphics, broadcast design, or other motion graphic careers.
8. Operate within legal frameworks and guidelines of media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

10 HOURS MASS COMMUNICATION FOUNDATION
COMM-2613 Media, Faith, and Culture
COMM-4631 Senior Seminar in Communication
COMM-4713 Media Law
COMM-4723 Media Ethics
5 HOURS EXPERIENCE-
You must take COMM-1371 or COMM-3371 each semester after completing COMM-1211. After satisfying the major requirement, additional practicum hours will count toward the 126 hours required for the degree. Internships may be substituted for two of these hours.

## 29 HOURS INTERACTIVE MEDIA REQUIRED

COMM-1211 Introduction to Electronic Media
COMM-1361 Interactive Media Workshop
COMM-2643 Media Production
COMM-2723 Scriptwriting for TV and Movies

COMM-3633 Audio for Media
COMM-3653 Field Production and Editing
COMM-3703 Motion Graphics
COMM-3723 Interviewing
COMM-3733 Media Marketing and Sales
COMM-4513 Administrative Aspects of Electronic Media
COMM-4763 Advanced Media Production
12 HOURS REQUIRED
ARTS-1103 Technology for Graphics
ARTS-2243 Interactive Media Design I
ARTS-2743 3D Modeling and Animation I
COMM-3143 Basics of Visual Communication Design

## UNIVERSITY CORE CURRICULUM:

## B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## CommUncatoon, و Hour

ENGL-1113 English Composition
ENGL-1213 English Composition
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS |  |
| :--- | :--- |
| BIBL-4523 | Capstone: Christ and His <br> World |
| POLITICAL |  |


| SCIENCE, 3 HOURS |
| :--- | :--- |
| POLS-2113 |
| Introduction to |
| American Government |

AMERICAN HISTORY, 3 HOURS
 Music

SCIENCE, 6 HOURS
CHOOSE 4 OF THE FOLLOWING 5 AREAS:
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
GREAT WORKS, ADDITIONAL, 3 HOURS
Choose 3 hours from list on the left
WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Perspectiv
Civilization

| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: |
| GEOG-2113 | Elements of Human |
|  | Geography |
| GEOG-2213 | World Regional |
|  | Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious |
|  | Movements |
| MUSC-3213 | Perspectives in World Music |
| LIBERAL ARTS, 3 HOURS |  |
| outside major, as approved by your department |  |
| *For more information on how to apply the |  |
| study abroad trips to the core curriculum, see |  |
|  |  |

## B.S. DEGREE IN MASS COMMUNICATION, <br> ELECTRONIC MEDIA-MEDIA MANAGEMENT - 56 HOURS

An OC graduate with a Bachelor of Science degree in Mass Communication, Electronic Media-Broadcast Management will:

1. Have been encouraged to sustain or adopt a Christian worldview characterized by participation in a Christian community.
2. Have been encouraged to balance career, family, church, and community successfully.
3. Be familiar with the appropriate theories of communication.
4. Have developed the appropriate writing styles and skills expected by future employers or graduate programs.
5. Have an understanding of the fundamentals of research and be able to interpret research findings.
6. Understand the ethics of communication.
7. Be able to pursue successfully a career as a media salesperson or on-air radio personality possessing the talents to advance beyond an entry-level of employment.
8. Operate within legal frameworks and guidelines of media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 10 HOURS MASS COMMUNICATION FOUNDATION | COMM-3343 | Campaigns |
| :---: | :---: | :---: |
| COMM-2613 Media, Faith, and Culture | COMM-3371 | Advanced Broadcasting Workshop |
| COMM-4631 Senior Seminar in Communication | COMM-3633 | Audio for Media |
| COMM-4713 Media Law | COMM-3653 | Field Production and Editing |
| COMM-4723 Media Ethics | COMM-3723 | Interviewing |
|  | COMM-3733 | Media Marketing and Sales |
| 5 HOURS EXPERIENCE | COMM-4513 | Administrative Aspects of Electronic Media |
| You must take COMM-1371 or COMM-3371 each semester after completing |  |  |
| COMM-1211. After satisfying the major requirement, additional practicum hours | 3 HOURS NEW | TIVE |
| will count toward the 126 hours required for the degree. Internships may be | COMM-3453 | Electronic News Writing |
| substituted for two of these hours. | COMM-4123 | Electronic News Producing |
| 32 HOURS MEDIA MANAGEMENT REQUIRED | 3 HOURS BUS | REQUIRED |
| COMM-1211 Introduction to Electronic Media | MGMT-3113 | Principles of Management |
| COMM-2113 Writing for Media |  |  |
| COMM-2213 Voice and Articulation | 3 HOURS BUS | ELECTIVES |
| COMM-2643 Media Production | Any managem | marketing course |
| COMM-2813 Advertising Principles |  |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
|  |  |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURSshould include literature |  |
|  |  |
| ARTS-2013 ARTS-2423 | Survey of Visual Culture |
|  |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |


| MUSC-2013 | Music Appreciation <br> MUSC-3213 <br> Perspectives in World <br> Music |
| :--- | :--- |
| SCIENCE, 6 HOURS |  |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  |
| BEHAVIORAL SCIENCE, 3 HOURS |  |
| PSYC-1113 | General Psychology I |
| GREAT WORKS, ADDITIONAL, 3 HOURS |  |
| Choose 3 hours from list on the left |  |
| WESTERN CIVILIZATION, 3 HOURS |  |
| HIST-2923 | Perspectives in Western <br> Civilization |

NON-WESTERN CIVILIZATION, 3 HOURS GEOG-2113 Elements of Human Geography World Regiona
GEOG-2213 Woria Region
HIST-2613 The Modern Middle East
MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious
Movements
MUSC-3213 Perspectives in World Music

LIBERAL ARTS, 3 HOURS outside major, as approved by your department
*For more information on how to apply the study abroad trips to the core curriculum, see page 25.

## B.S. DEGREE IN MASS COMMUNICATION-PUBLIC RELATIONS 58 HOURS

An OC graduate with a Bachelor of Science degree in Mass Communication-Public Relations will:

1. Have been encouraged to sustain or adopt a Christian worldview characterized by participation in a Christian community.
2. Have been encouraged to balance career, family, church, and community successfully.
3. Be familiar with the appropriate theories of communication.
4. Have developed the appropriate writing styles and skills expected by future employers or graduate programs.
5. Have an understanding of the fundamentals of research and be able to interpret research findings.
6. Understand the ethics of communication.
7. Be able to pursue succesfully a master's degree in business or public relations, or to pursue a career in public relations, corporate communications, or a communications profession in an agency, firm, corporation, non-profit, sports franchise, or other organizational environment.
8. Operate within legal frameworks and guidelines of media.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 10 HOURS MASS COMMUNICATION FOUNDATION | COMM-3343 | Campaigns |  |
| :--- | :--- | :--- | :--- |
| COMM-2613 | Media, Faith, and Culture | COMM-3543 | Public Relations Strategies and Case Studies |
| COMM-4631 | Senior Seminar in Communication | COMM-3743 | PR Writing and Production Techniques |
| COMM-4713 | Media Law | COMM-4663 | Symposium in PR Research and Practice |
| COMM-4723 | Media Ethics |  |  |
|  |  | HOURS REQUIRED |  |
| 3 HOURS EXPERIENCE: YOU MUST CHOOSE FROM | ARTS-1103 | Technology for Graphics |  |
| COMM-1361 and COMM-3361 | MKTG-3313 | Principles of Marketing |  |
| *An internship may be substituted for one of these hours. |  |  |  |
|  |  | HOURS RESTRICTED ELECTIVES |  |
| 33 HOURS PUBLIC RELATIONS REQUIRED | COMM-3143 | Basics of Visual Communication Design |  |
| COMM-2113 | Writing for Media | COMM-3243 | Planning, Organizing, and Leading Events |
| COMM-2413 | Photographic Principles and Practices | COMM-3723 | Interviewing |
| COMM-2643 | Media Production | COMM-3733 | Media Marketing and Sales |
| COMM-2813 | Advertising Principles | MGMT-3113 | Principles of Management |
| COMM-2823 | Public Relations Principles | MKTG-3413 | Consumer Behavior |
| COMM-2833 | Reporting | MKTG-3513 | Electronic Commerce and Online Marketing |
| COMM-3233 | Managing Social Media | MKTG-4513 | Marketing Research |

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS

| ENGL-1113 | English Composition I |
| :--- | :--- |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |


| MATHEMATICS, 3 HOURS |
| :--- | :--- |
| appropriate to major |


| REQUIRED |  |
| :--- | :--- |
| BIBL-1212 | Life, of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
| BIBL-2302 | Testament |
|  | Story of the New |
| Testament |  |


| BIBLE ELECTIVE, 5 HOURS |  |
| :--- | :--- |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

CAPSTONE, 3 HOURS
BIBL-4523
Capstone: Christ and His
World

| MUSC-2013 <br> MUSC-3213 | Music Appreciation Perspectives in World Music |
| :---: | :---: |
| SCIENCE, 6 HOURS |  |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  |
| BEHAVIORA PSYC-1113 | SCIENCE, 3 HOURS General Psychology I |
| GREAT WOR Choose 3 hour | KS, ADDITIONAL, 3 HOURS s from list on the left |
| $\begin{aligned} & \text { WESTERN C } \\ & \text { HIST-2923 } \end{aligned}$ | VILIZATION, 3 HOURS Perspectives in Western Civilization |


| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :--- | :--- |
| GEOG-2113 | Elements of Human |
| Geography |  |

## B.S. DEGREE IN PUBLIC COMMUNICATION AND LEADERSHIP 43 HOURS, MINOR REQUIRED

An OC graduate with a Bachelor of Arts degree in Public Communication with Leadership emphasis will:

1. Learn a variety of theories related to communication and leadership and how to apply those theories in praxis.
2. Learn a variety of communicative skills, leadership skills, and techniques for the management of interpersonal relations, group leadership, and social media.
3. Explore ethical approaches to communication leadership from a Christian faith perspective.
4. Learn ethical persuasive techniques grounded in Christian faith to help them become skillful advocates for important social issues.
5. Learn how to plan, host, and conduct public forums for issues of public importance and controversial issues.
6. Learn peacemaking and conflict management skills.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 25 HOURS COMMUNICATION FOUNDATION |  |
| :--- | :--- |
| COMM-2003 | Effective Leadership |
| COMM-2113 | Writing for Media |
| COMM-2513 | Communication Theory |
| COMM-3003 | Family Communication and Leadership |
| COMM-3243 | Planning, Organizing, and Leading Events |
| COMM-3333 | Team Communication and Leadership |
| COMM-3353 | Interpersonal Communication |
| COMM-4631 | Senior Seminar in Communication |
| COMM-4733 | Communication Ethics |
| 9 HOURS COMMUNICATION LEADERSHIP |  |
| COMM-3233 | Managing Social Media |
| COMM-4113 | Persuasion and Advocacy |
| COMM-4523 | Conflict Resolution and Negotiation |

6 HOURS CHOSEN FROM
COMM-3323 Organizational Communication
COMM-3413 Argumentation and Debate
COMM-3723 Interviewing
COMM-4633 Intercultural Communication
COMM-4813 Special Studies: Guest Speakers
COMM-4963 Intern Experience
3 HOURS CHOSEN FROM
BUSA-3213 Business Law
COMM-4713 Media Law
POLS-4113 Constitutional Law
MINOR CHOSEN FROM ONE OF THE FOLLOWING SPECIALTY AREAS:
Business
Political Science

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New
Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

CAPSTONE, 3 HOUR
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S.

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \&
$\begin{array}{ll}\text { ARTS-2423 } & \begin{array}{l}\text { History of Photo } \\ \text { Motion Pictures }\end{array}\end{array}$
COMM-2023 History of Theater

ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
CHOOSE 4 OF THE FOLLOWING 5 AREAS:
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
GREAT WORKS, ADDITIONAL, 3 HOURS
Choose 3 hours from list on the left
WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regiona
Geography
HIST-2613 The Modern Middle East
MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious
Movements
MUSC-3213 Perspectives in World Music

LIBERAL ARTS, 3 HOURS
outside major, as approved by your department
*For more information on how to apply the study abroad trips to the core curriculum, see page 25 .

## B.S. DEGREE IN PUBLIC COMMUNICATION WITH THEATER EMPHASIS 43 HOURS, MINOR REQUIRED

An OC graduate with a Bachelor of Science degree in Public Communication with a Theater Emphasis will:

1. Learn a variety of theories related to communication and leadership and how to apply those theories in praxis.
2. Learn a variety of communicative skills and techniques for the management of interpersonal relations, group leadership, and social media.
3. Explore ethical approaches to communication from a Christian faith perspective.
4. Learn the development of Western theatrical traditions through the earliest records of theatrical staging to today's diversity of stage performance from a faithbased Christian perspecitve.
5. Learn basic training in acting choices, stage technique, and creating a character involving scene work and character analysis, with application within a laboratory experience.
6. Learn a variety of additional theater performance skills, including voice and articulation and directing, and how to apply those skills effectively in performance for an audience, while supported and encouraged to remember that our dedication to Christ is our number one concern.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 25 HOURS COMMUNICATION FOUNDATION

## COMM-2113 Writing for Media

COMM-2513 Communication Theory
COMM-3243 Planning, Organizing and Leading Events
COMM-3333 Team Communication and Leadership
COMM-3353 Interpersonal Communication
COMM-4631 Senior Seminar in Communication
COMM-4633 Intercultural Communication
COMM-4673 Symposium and Public Communication and Leadership
COMM-4733

6 HOURS CHOSEN FROM

| COMM-1311 | Communication Practicum |
| :--- | :--- |
| COMM-3311 | Communication Practicum |
| COMM-4103 | Modern Drama |
| COMM-4913 | Directing Experience |
| ENGL-4213 | Studies in Shakespeare |

## 12 HOURS THEATER FOCUS

COMM-2023 History of the Theater
COMM-2213 Voice and Articulation
COMM-2313 Acting I
COMM-3213 Stage Directing

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \&
Motion Pictures
COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature
 Music

SCIENCE, 6 HOURS
CHOOSE 4 OF THE FOLLOWING 5 AREAS:
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
GREAT WORKS, ADDITIONAL, 3 HOURS
Choose 3 hours from list on the left
WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Civilization

| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: |
| GEOG-2113 | Elements of Human |
|  | Geography |
| GEOG-2213 | World Regional |
|  | Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious |
|  | Movements |
| MUSC-3213 | Perspectives in World |
|  | Music |
| LIBERAL ARTS, 3 HOURS <br> outside major, as approved by your department |  |
|  |  |
|  |  |
| *For more information on how to apply the study abroad trips to the core curriculum, see page 25. |  |
|  |  |
|  |  |

# DEPARTMENT OF CRIMINAL JUSTICE 

AREAS OF STUDY

Criminal Justice (CRMJ)
DEGREES OFFERED
B.S. Degree in Criminal Justice

FACULTY
Sid Brown, J.D., Distinguished Visiting Professor of Criminal Justice
LOCATION
Mabee Learning Center

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC-121A

## B.S. DEGREE IN CRIMINAL JUSTICE <br> 45 HOURS, MINOR REQUIRED

The degree provides an academic program for those students interested in learning about the institutions, laws, and public policies of local, national, and global governance. It encompasses a broad theoretical and substantive survey of governance institutions, laws, and public policies. Students will be prepared for entry-level public service careers, law school, and many graduate programs in public policy, political science, public administration, and political management.

An OC graduate with a Bachelor of Science degree in Criminal Justice will:

1. Identify ways in which oppression, privilege, discrimination, and social and economic disadvantage contribute to inequalities and injustices within criminal justice systems.
2. Demonstrate an understanding of the origins of criminal behavior, society's response to crime, and the consequences of crime to our society, utilizing multiple perspectives.
3. Articulate ethical implications of decision-making in a professional capacity.
4. Develop and demonstrate sufficient critical self-awareness to understand the influence of personal biases and values when interacting with diverse groups
5. Demonstrate an understanding of qualitative and quantitative research methods to collect and analyze data including basic introductory statistical concepts.
6. Demonstrate an understanding of selected case law and procedures outlined by the United States Constitution and Bill of Rights for criminal procedure.
7. Demonstrate and understanding of the adult and the juvenile justice systems as it relates to corrections and alternative corrections at various levels of government.
8. Demonstrate an understanding of the role of community policing as well as basic police procedures.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 12 HOURS FOUNDATION

CHEM-2113 Introduction to Forensic Science
COMM-3333 Team Communication and Leadership
GNSC-3113 Forensic Science and the Law
PSCY-3913 Psychology of Crime
3 HOURS STATISTICAL ANALYSIS CHOSEN FROM
POLS-2513 Data Analysis
SOCI-3113 Intro to Psychology Statistics

## 30 HOURS CRIMINAL JUSTICE

CRMJ-1003 Introduction to Criminal Justice
CRMJ-2003 Deviance and Social Justice
CRMJ-2013 Theories of Criminal Behavior
CRMJ-3003 Comparitive Justice Systems
CRMJ-3013 Cultural Diversity in Criminal Justice
CRMJ-3033 The Juvenile Offender
CRMJ-4003 Capstone: Contemporary Issues in Criminal Justice
CRMJ-4013 Criminal Procedure
CRMJ-4023 Ethics in Criminal Justice
CRMJ-4033 Introduction to Criminal Investigation

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS

| ENGL-1113 | English Composition I |
| :--- | :--- |
| ENGL-1213 English Composition II <br> COMM-1213 Oral Communication <br>   <br> MATHEMATICS, 3 HOURS  <br> appropriate to major  <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old <br>  Testament <br> BIBL-2302 Story of the New <br>  Testament <br> BIBLE ELECTIVE, 5 HOURS  <br> 5 hours of Bible courses, except Missions  <br> Experience  |  | 

## COMMUNICATION, 9 HOURS

NGL-1113 - English Composition ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
Testament
BIBLE ELECTIVE, 5 HOURS
Experience

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
| MUSC-2013 | Music Appreciation |  | Elements of Human |
| MUSC-3213 | Perspectives in World | GEOG-2113 | Geography |
|  | Music | GEOG-2213 | World Regional |
|  |  |  | Geography |
| SCIENCE, 6 HOURS |  | HIST-2613 | The Modern Middle East |
| used in major |  | MISS-3513 | World Religions |
|  |  | MISS-3613 | Cultural Anthropology |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  | MISS-3673 | New Religious |
|  |  | Movements |
| BEHAVIORAL SCIENCE, 3 HOURS |  |  | MUSC-3213 | Perspectives in World |
| PSYC-1113 | General Psychology I | Music |  |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  | LIBERAL ARTS, 3 HOURS outside major, as approved by your department |  |
|  |  |  |  |  |
|  |  |  |  |  |
| WESTERN CIVILIZATION, 3 HOURS |  | *For more information on how to apply the study abroad trips to the core curriculum see |  |
| HIST-2923 | Perspectives in Western |  |  |  |
|  | Civilization | study abroad page 25. |  |

# DEPARTMENT OF <br> HISTORY \& POLITICAL SCIENCE 

## AREAS OF STUDY

Geography (GEOG)
History (HIST)
Political Science (POLS)
DEGREES OFFERED
B.A. Degree in History
B.A. Degree in History/Pre-Law
B.S. Degree in History/Pre-Law
B.S. Degree in Political Science
B.S.E. Degree in Social Studies

MINORS
History
Political Science
Social Science
FACULTY
Gary Lindsey, Ph.D., Professor of History
John Maple, Ph.D., Department Chair of History and Political Science, Distinguished Professor of History
Matt McCook, Ph.D., Professor of History
Trey Orndorff, Ph.D., Associate Professor of Political Science

LOCATION
Davisson American Heritage Building
DEAN
Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC 121A

## B.A. DEGREE IN HISTORY 42 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

An OC graduate with a Bachelor of Arts degree in History will:

1. Demonstrate knowledge of the fundamentals of American, European, and public history.
2. Demonstrate an understanding of the nature of history and knowledge of basic research techniques, the use of documents, and the handling of evidence, as part of a Christian worldview.
3. Demonstrate analytical and critical thinking through effective communication of independent research.
4. Be able to apply Christian ethics to life situations.
5. Have an increased understanding of people of different cultures, times, and places.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 6 HOURS WESTERN CIVILIZATION

| HIST-2923 | Perspectives in Western Civilization <br> and <br> Any European history course |
| :--- | :--- |

## 6 HOURS AMERICAN HISTORY

| HIST-2213 | History of the U.S. to 1877 |
| :--- | :--- |
| HIST-2223 | History of the U.S. Since 1877 |

9 HOURS RESEARCH
Courses must be passed with a grade of C or better
HIST-2123 Introduction to Historical Research

HIST-2813 Data Analysis
HIST-4733 Senior History Seminar

## 3 HOURS PUBLIC HISTORY

HIST-2723 Introduction to Public History
15 HOURS 3000/4000 LEVEL COURSES
3 HOURS HISTORY ELECTIVES
6 HOURS IN THE SAME FOREIGN LANGUAGE

## UNIVERSITY CORE CURRICULUM:

B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
 World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
used in major
used in major History of the U.S. to 1877
GREAT WORKS, 6 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \& Motion Pictures

COMM-2023 History of Theater
ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS
used in major
HIST-2923 Perspectives in Western Civilization

| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :--- | :--- |
| GEOG-2113 Elements of Human <br> Geography  |  |
| GEOG-2213 | World Regional Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious Movements |
| MUSC-3213 | Perspectives in World Music |
| *For more information on how to apply study |  |
| abroad trips to the core curriculum, see the |  |
| chart on page 25. |  |

## B.A. DEGREE IN HISTORY/PRE-LAW <br> 63 HOURS, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The B.A. in History/Pre-Law combines work in history, political science, economics, and literature to prepare the student for a variety of career opportunities and graduate studies. This degree is designed as preparation for careers in public administration, civil service, or foreign service, typically after taking an appropriate graduate degree. It also provides a good background for graduate work in the areas studied and is an excellent preparation for law school.

An OC graduate with a Bachelor of Arts degree in History/Pre-Law will:

1. Demonstrate knowledge of the fundamentals of American and European history.
2. Demonstrate an understanding of the nature of history and knowledge of basic research techniques, the use of documents, and the handling of evidence, as part of a Christian worldview.
3. Demonstrate analytical and critical thinking through effective communication of independent research.
4. Be able to apply Christian ethics to life situations.
5. Be familiar with law school pedagogy and course work.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 6 HOURS WESTERN CIVILIZATION | 18 HOURS - OPTION A OR OPTION B |
| :---: | :---: |
| HIST-2923 Perspectives in Western Civilization |  |
| and | OPTION A <br> HOURS POLITICAL SCIENCE |
| Any European history course | POLS-2113 Introduction to American Government |
| 6 HOURS AMERICAN HISTORY | POLS-3313 Legal and Legislative Analysis |
| HIST-2213 History of the U.S. to 1877 | POLS-4113 Constitutional Law |
| HIST-2223 History of the U.S. Since 1877 | 3 HOURS POLITICAL SCIENCE CHOSEN FROM |
| 9 HOURS RESEARCH | POLS-3413 The Presidency and Congress |
| Both courses must be passed with a grade of C or better | POLS-3613 Political Parties and Interest Groups |
| HIST-2123 Introduction to Historical Research | POLS-3713 State and Local Politics |
| HIST-2813 Data Analysis |  |
| HIST-4733 Senior History Seminar | 6 HOURS POLITICAL SCIENCE ELECTIVES-2000 LEVEL OR HIGHER |
| 15 HOURS 3000/4000 LEVEL <br> It is recommended that these include both American and European history courses. | OPTION B |
|  | 9 HOURS POLITICAL SCIENCE |
|  | POLS-2113 Introduction to American Government |
| 3 HOURS HISTORY ELECTIVES-2000 LEVEL OR HIGHER | POLS-3313 Legal and Legislative Analysis |
|  | POLS-4113 Constitutional Law |
| 6 HOURS BUSINESS CHOSEN FROM |  |
| ACCT-2113 Accounting Principles I | 9 HOURS LITERATURE IN COURSES ABOVE ENGL-2213 |
| BUSA-4213 Business Law | 6 HOURS OF THE SAME FOREIGN LANGUAGE |
| ECON-2113 Macroeconomics |  |
| ECON-2213 Microeconomics |  |

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| Appropriate to major |  |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old Testament |
| BIBL-2302 | Story of the New Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |


| CAPSTONE, 3 HOURS <br> BIBL-4523 <br> Capstone: Christ and His <br> World |  |
| :--- | :--- |
| POLITICAL SCIENCE, 3 HOURS |  |
| used in major  <br> POLS-2113 Introduction to <br> American Government  |  |
| AMERICAN HISTORY, 3 HOURS <br> HIST-2213 History of the U.S. to 1877 |  |
| GREAT WORKS, 6 HOURS <br> should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
| COMM-2023 | Motion Pictures |
| History of Theater |  |

$\begin{array}{ll}\text { HIST-2613 } & \text { The Modern Middle East } \\ \text { MISS-3513 } & \text { World Religions } \\ \text { MISS-3613 } & \text { Cultural Anthropology } \\ \text { MISS-3673 } & \text { New Religious Movements } \\ \text { MUSC-3213 } & \text { Perspectives in World Music } \\ \text { *For more information on how to apply study } \\ \text { abroad trips to the core curriculum, see the } \\ \text { chart on page 25. }\end{array}$

## B.S. DEGREE IN HISTORY/PRE-LAW 63 HOURS

The B.S. in History/Pre-Law combines work in history, political science, economics, and literature to prepare the student for a variety of career opportunities and graduate studies. This degree is designed as preparation for careers in public administration, civil service, or foreign service, typically after taking an appropriate graduate degree. It also provides a good background for graduate work in the areas studied and is an excellent preparation for law school.

An OC graduate with a Bachelor of Science degree in History/Pre-Law will:

1. Demonstrate knowledge of the fundamentals of American and European history.
2. Demonstrate an understanding of the nature of history and knowledge of basic research techniques, the use of documents, and the handling of evidence, as part of a Christian worldview.
3. Demonstrate analytical and critical thinking through effective communication of independent research.
4. Be able to apply Christian ethics to life situations.
5. Be familiar with law school pedagogy and course work.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 6 HOURS WESTERN CIVILIZATION | 18 HOURS - OPTION A OR OPTION B |
| :---: | :---: |
| HIST-2923 Perspectives in Western Civilization |  |
| and | OPTION A |
| Any European history course 9 HOURS POLITICAL SCIENCE |  |
|  |  |
| 6 HOURS AMERICAN HISTORY | POLS-2113 Introduction to American Government |
| HIST-2213 History of the U.S. to 1877 | POLS-3313 Legal and Legislative Analysis |
| HIST-2223 History of the U.S. Since 1877 | POLS-4113 Constitutional Law |
| 9 HOURS RESEARCH | 3 HOURS POLITICAL SCIENCE CHOSEN FROM |
| Courses must be passed with a grade of C or better | POLS-3413 The Presidency and Congress |
| HIST-2123 Introduction to Historical Research | POLS-3613 Political Parties and Interest Groups |
| HIST-2813 Data Analysis | POLS-3713 State and Local Politics |
| HIST-4733 Senior History Seminar | 6 HOURS POLITICAL SCIENCE ELECTIVES-2000 LEVEL OR HIGHER |
| 15 HOURS 3000/4000 LEVEL. | OPTION B |
| It is recommended that these include both American and European history courses. |  |
|  | 9 HOURS POLITICAL SCIENCE |
| 3 HOURS HISTORY ELECTIVES-2000 LEVEL OR HIGHER | POLS-2113 Introduction to American Government |
|  | POLS-3313 Legal and Legislative Analysis |
| 6 HOURS BUSINESS CHOSEN FROM | POLS-4113 Constitutional Law |
| ACCT-2113 Accounting Principles I |  |
| BUSA-4213 Business Law | 9 HOURS LITERATURE IN COURSES ABOVE ENGL-2213 |
| ECON-2113 Macroeconomics |  |
| ECON-2213 Microeconomics |  |

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old <br> Testament <br> BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
used in major
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
used in major
HIST-2213 History of the U.S. to 1877
GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \&
COMM-2023 History of Theater

ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
CHOOSE 4 OF THE FOLLOWING 5 AREAS:
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
GREAT WORKS, ADDITIONAL, 3 HOURS
Choose 3 hours from list on the left
WESTERN CIVILIZATION, 3 HOURS
used in major
HIST-2923 Perspectives in Western Civilization

| NON-WESTERN CIVILIZATION, 3 HOURS GEOG-2113 Elements of Human |  |
| :---: | :---: |
|  |  |
|  | Geography |
| GEOG-2213 | World Regional |
|  | Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| $\begin{aligned} & \text { MISS-3613 } \\ & \text { MISS-3673 } \end{aligned}$ | Cultural Anthropology |
|  | New Religious |
|  | Movements |
| MUSC-3213 | Perspectives in World |
|  | Music |
| LIBERAL ARTS, 3 HOURS |  |
| outside major, as approved by your department |  |
|  |  |
| *For more information on how to apply the study abroad trips to the core curriculum see page 25. |  |
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|  |  |

## B.S. DEGREE IN POLITICAL SCIENCE <br> 45 HOURS, MINOR REQUIRED

The degree provides an academic program for those students interested in learning about the institutions, laws, and public policies of local, national, and global governance. It encompasses a broad theoretical and substantive survey of governance institutions, laws, and public policies. Students will be prepared for entry-level public service careers, law school, and many graduate programs in public policy, political science, public administration, and political management.

An OC graduate with a Bachelor of Science degree in Political Science will:

1. Demonstrate knowledge of the fundamentals of American and global political systems and actions.
2. Demonstrate an understanding of the nature of political science and knowledge of basic social science research techniques, as part of Christian worldview.
3. Demonstrate analytical and critical thinking through effective written and oral communication.
4. Be able to apply Christian ethics to life situations.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 9 HOURS SURVEY

POLS-2113 Introduction to American Government
POLS-2213 Introduction to Global Politics
POLS-2413 Comparative Politics
3 HOURS LEGAL STUDIES CHOSEN FROM
POLS-3313 Legal and Legislative Analysis
POLS-4113 Constitutional Law
9 HOURS 3000/4000 LEVEL GLOBAL OR COMPARATIVE POLITICS

## 9 HOURS 3000/4000 LEVEL AMERICAN POLITICS

9 HOURS RESEARCH
Courses must be passed with a grade of C or better.
POLS-2313 Research Skills in Political Science

POLS-2513 Data Analysis
POLS-4713 Political Science Seminar
6 HOURS ELECTIVE POLITICAL SCIENCE OR 3 HOURS POLITICAL SCIENCE AND 3 HOURS MACROECONOMICS
May include an internship

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old <br> Testament <br> BIBL-2302 Story of the New <br> Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOUR
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
used in major
POLS-2113 Introduction to American Government

AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \&
Motion Pictures
COMM-2023 History of Theater

| ENGL-2213 | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
| MUSC-2013 | Music Appreciation | GEOG-2113 | Elements of Human |
| MUSC-3213 | Perspectives in World | GEOG-2213 | Geography |
|  | Music |  | World Regional |
|  |  |  | Geography |
| SCIENCE, 6 HOURS |  | HIST-2613 | The Modern Middle East |
|  |  | MISS-3513 | World Religions |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  | MISS-3613 | Cultural Anthropology |
|  |  | MISS-3673 | New Religious |
| BEHAVIORAL SCIENCE, 3 HOURS |  | MUSC-3213 | Movements |
| PSYC-1113 | General Psychology I |  | Perspectives in World Music |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  | LIBERAL ARTS, 3 HOURS outside major, as approved by your |  |
|  |  |  |  |
|  |  |  |  |
| WESTERN CIVILIZATION, 3 HOURS |  | department |  |
| HIST-2923 | Perspectives in WesternCivilization | *For more information on how to apply the study abroad trips to the core curriculum see page 25 . |  |
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|  |  |  |  |

## B.S.E. DEGREE IN SOCIAL STUDIES EDUCATION <br> 78 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

This degree is designed as preparation for those who plan to obtain a certificate to teach social studies in grades 6 -12. The state of Oklahoma requires teacher education to be competency based; thus, this degree aims at providing students with the knowledge and skills to achieve competency in the various social studies. The program requires a minimum total of 45 hours distributed among all of the following fields: American history, world history, historical research, Oklahoma history, government, sociology, economics, and geography. Historical research is not a teaching area, but 6 hours are required for the degree.

An OC graduate with a Bachelor of Science in Social Studies Education will:

1. Have a broad knowledge of the fundamentals of the social studies, including American and world history, political science, economics, sociology, and geography.
2. Demonstrate an understanding of the nature of history and knowledge of basic research techniques, the use of documents, and the handling of evidence, as part of a Christian worldview.
3. Demonstrate analytical and critical thinking through effective communication of independent research.
4. Understand and employ principles of effective teaching.
5. See teaching as an opportunity for Christian service as well as a vocation.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

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6 HOURS REQUIRED AMERICAN HISTORY
HIST-2213 History of the U.S. to }187
HIST-2223 History of the U.S. Since 1877
6 HOURS 3000/4000 LEVEL AMERICAN HISTORY COURSES
HIST-4013 American Revolutionary and Early National Eras
    is highly recommended
3 HOURS REQUIRED WESTERN CIVILIZATION
HIST-2923 Perspectives in Western Civilization
6 HOURS OTHER WORLD HISTORY
including 3 hours numbered 3000 and above
HIST-2613 The Modern Middle East is highly recommended
6 HOURS RESEARCH COURSES
Both courses must be passed with a grade of C or better
HIST-2123 Introduction to Historical Research
HIST-4733 Senior History Seminar
6 HOURS GEOGRAPHY
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regional Geography
3 HOURS ECONOMICS
ECON-2113 Macroeconomic Principles
3 HOURS AMERICAN GOVERNMENT
POLS-2113 Introduction to American Government
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3 HOURS SOCIOLOGY
SOCl-1113 Perspectives in Sociology

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3 HOURS OKLAHOMA HISTORY
HIST-2313 Oklahoma History
PROFESSIONAL EDUCATION
25 SEMESTER HOURS PROFESSIONAL EDUCATION
EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations and Behavior Management
EDUC-4131 Applied Instructional and Assessment Strategies
EDUC-4132 Critical Issues in Education
EDUC-4718 Student Teaching in the Secondary Schools
5 HOURS OTHER COURSES
EDUC-4112 Literacy in the Secondary Content Areas
PSYC-3523 Developmental Psychology
3 HOURS METHODS COURSE
EDUC-4473 Methods of Teaching Social Studies in Sec. Schools
FOREIGN LANGUAGE COMPETENCY CHOOSE ONE:
High School Foreign Language - 2 years of same language with a grade of " }\textrm{C}\mathrm{ "
    or better
University credit - 3 hours foreign language or American Sign Language with a
    grade of "C" or better.
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UNIVERSITY CORE CURRICULUM:
B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE
communcation, و hưrs
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

| BIBL-1212 | Life of Christ: Matthew | POLITICAL SCIENCE, 3 HOURS |  |
| :--- | :--- | :--- | :--- |
| BIBL-1312 | Life of the Early Church: Acts | used in major |  |
| BIBL-2202 | Story of the Old Testament |  | Introduction to |
| BIBL-2302 | Story of the New Testament |  | American Government |

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
used in major
OLS-213 Ame American Government

AMERICAN HISTORY, 3 HOURS
used in major
HIST-2213 History of the U.S. to 1877
GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS
used in major
PSYC-1113 General Psychology I
SOCI-1113 $\stackrel{\text { or }}{\text { Perspectives in Sociology }}$

DEVELOPMENTAL PSYCHOLOGY, 3 HRS used in major PSYC-3523 Developmental Psychology

LIBERAL ARTS, 6 HOURS
6 hours from any Liberal Arts area, other than current major
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

# DEPARTMENT OF <br> INTERDISCIPLINARY STUDIES 

## AREAS OF STUDY

Interdisciplinary Studies
Performing Arts Management

## DEGREES OFFERED

B.A. Degree in Interdisciplinary Studies
B.A. Degree in Performing Arts Management
B.S. Degree in Interdisciplinary Studies

## MINORS

International Studies Minor
Military Science

## FACULTY

Hannah Bingham Brunner, M.A., Visiting Instructor of English
J.J. Compton, M.L.I.S., Associate Professor of Library Science

Larry Jurney, Ph.D., Department Chair of Interdisciplinary Studies, Professor of Mass Communication
David Lowry, Ph.D., Professor of Communication
Tamie Willis, M.L.I.S., Director of the Library, Professor of Library Science,
Periodical Research Librarian

LOCATION
Garvey Center

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC 121A

## B.A. DEGREE IN INTERDISCIPLINARY STUDIES 60 HOURS, INCLUDING 6 HOURS OF SAME FOREIGN LANGUAGE

This degree program is designed for the highly motivated student who is seeking insight in several areas of knowledge rather than a deep insight into only one. An interdisciplinary curriculum, including such areas as the social, religious, political, and scientific, will aid the student in understanding contemporary American culture and his or her place in it. This degree program also serves the student who wishes to craft a program of studies from existing courses and majors in order to lay a foundation for a specific career or professional goal not addressed by other OC majors. For example, a student interested in operating a music production studio may propose an academic plan combining courses from the business, music, and communication departments.

Each student will design a program with the aid of an advisor and submit the program proposal to the department of interdisciplinary studies for approval. The program must be approved by the interdisciplinary studies committee, composed of the student's advisor, the chair of the department of interdisciplinary studies, and the Registrar. Usually, the program is submitted during the sophomore year.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

60 HOURS, 39 OF WHICH MUST BE 3000/4000 LEVEL COURSES
COURSES ARE TO BE DIVIDED AMONG THREE AREAS
At least one of which must be in the humanities such as Art, Bible, History, English, Music, or Speech

MINIMUM 9 HOURS OF 3000/4000 LEVEL CLASSES IN EACH AREA
6 HOURS IN THE SAME FOREIGN LANGUAGE

## A STUDENT MUST DECLARE A MAJOR IN INTERDISCIPLINARY STUDIES BEFORE REACHING 96 HOURS.

THE STUDENT MUST MEET MINIMUM HOURS OF 126 IN ORDER TO GRADUATE.

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

## BIBL-1212 Life of Christ: Matthew

BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History
GREAT WORKS, 6 HOURS
should include literature
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \&
COMM-2023 History of Theater

ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human
Elementaphy
GEOG-2213 World Regional Geography
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.A. DEGREE IN PERFORMING ARTS MANAGEMENT <br> 36 HOURS, MINOR REQURED PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The Performing Arts Management major at OC will introduce students to the fundamentals of managing, marketing, and fundraising for community arts organizations. Students can tailor their degree program to pursue a particular artistic interest or capitalize on existing talents and skills.

An OC graduate with a Bachelor of Arts degree in Performing Arts Management will demonstrate:

1. Critically minded, ethical management skills.
2. Entrepreneurial self-initiative, especially toward the creation of arts-based projects.
3. An understanding of community engagement and promotional strategies.
4. Basic skills in a foreign language.
5. Elementary application of consumer analysis.
6. Comprehensive understanding of artistic principles and performance.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 12 HOURS COMMON FOUNDATION

COMM-2823 Public Relations Principles
ENGL-3493 Technical Writing
MGMT-3133 Principles of Management
MKTG-3313 Principles of Marketing

6 HOURS RESTRICTED ELECTIVES CHOSEN FROM
COMM-3113
Business and Professional Communication
COMM-3543 Public Relations Case Studies
MGMT-3323 Entrepreneurship and Small Business
Management
MGMT-3533 Issues in Management
MKTG-3413 Consumer Behavior
MKTG-4313 Promotional Strategies

18 HOURS CONCENTRATION AREA
Choose 18 hours in one area as approved by your advisor

6 HOURS SAME FOREIGN LANGUAGE
Take 6 hours of Spanish, Japanese, French, or German

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302
Story of the New Testament

## Bible elective, 5 HOURS

5 hours of Bible courses, except Missions
Experience


| COMM-2023 | History of Theater |
| :---: | :---: |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I |  |
| WESTERN CIVILIZATION, 3 HOURS |  |
| HIST-2923 | Perspectives in Western |

NON-WESTERN CIVILIZATION, 3 HOURS GEOG-2113 Elements of Human Geography GEOG-2213 World Regional Geography HIST-2613 The Modern Middle East MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious Movements
MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S. DEGREE IN INTERDISCIPLINARY STUDIES 60 HOURS

This degree program is designed for the highly motivated student who is seeking insight in several areas of knowledge rather than a deep insight into only one. An interdisciplinary curriculum, including such areas as the social, religious, political, and scientific, will aid the student in understanding contemporary American culture and his or her place in it. This degree program also serves the student who wishes to craft a program of studies from existing courses and majors in order to lay a foundation for a specific career or professional goal not addressed by other OC majors. For example, a student interested in operating a music production studio may propose an academic plan combining courses from the business, music, and communication departments.

Each student will design a program with the aid of an advisor and submit the program proposal to the department of interdisciplinary studies for approval. The program must be approved by the interdisciplinary studies committee, composed of the student's advisor, the chair of the department of interdisciplinary studies, and the Registrar. Usually, the program is submitted during the sophomore year.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

60 HOURS, 39 OF WHICH MUST BE 3000/4000 LEVEL COURSES
COURSES ARE TO BE DIVIDED AMONG THREE AREAS
at least one of which must be in the humanities such as Art, Bible, History, English, Music, or Speech

## MINIMUM 9 HOURS OF 3000/4000 LEVEL CLASSES IN EACH AREA

## A STUDENT MUST DECLARE A MAJOR IN INTERDISCIPLINARY STUDIES

 BEFORE REACHING 96 HOURS.THE STUDENT MUST MEET MINIMUM HOURS OF 126 IN ORDER TO GRADUATE.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

| REQUIRED | BIBLE, 8 HOURS |
| :--- | :--- |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
| BIBL-2302 | Testament |
|  | Story of the New <br> Testament |

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S.
GREAT WORKS, 3 HOURS
should include literature
ARTS-2013 Survey of Visual Culture
ARTS-2423 History of Photography \&
COMM-2023 Motion Pictures
COMM-2023 History of Theater

ENGL-2213 Perspectives in Literature MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
CHOOSE 4 OF THE FOLLOWING 5 AREAS:
BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I
GREAT WORKS, ADDITIONAL, 3 HOURS
Choose 3 hours from list on the left
WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Civilization

| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: |
| GEOG-2113 | Elements of Human |
|  | Geography |
| GEOG-2213 | World Regional |
|  | Geography |
| HIST-2613 | The Modern Middle East |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious |
|  | Movements |
| MUSC-3213 | Perspectives in World |
|  | Music |
| LIBERAL ARTS, 3 HOURS |  |
| outside major, as approved by your department |  |
|  |  |
| *For more information on how to apply the study abroad trips to the core curriculum see page 25 . |  |
|  |  |
|  |  |

## DEPARTMENT OF

## LANGUAGE \& LITERATURE

## AREAS OF STUDY

English (ENGL)
French (FRNC)
German (GERM)
Japanese (JAPN)
Spanish (SPAN)

## DEGREES OFFERED

B.A. Degree in English
B.A. Degree in English/Pre-Law
B.A. Degree in English/Teaching English as a Foreign Language (TEFL)
B.A. Degree in English/Writing
B.A. Degree in Spanish
B.S.E. Degree in English

MINORS
English
Spanish
Teaching English as a Foreign Language (TEFL)
Writing

FACULTY
Cami Agan, Ph.D., Professor of English
Hannah Bingham Brunner, M.A., Visiting Instructor of English
Scott LaMascus, Ph.D., Chief Academic Officer, Professor of English
Travis Montgomery, Ph.D., Associate Professor of English
Gail Nash, Ph.D., Department Chair of Language and Literature, Associate Professor of English
Nathan Shank, Ph.D., Assistant Professor of English
Tina Ware, Ph.D., Professor of Spanish
LOCATION
Mabee Learning Center
DEAN
Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC 121A

## B.A. DEGREE IN ENGLISH <br> 42 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The English major must meet all the general requirements for the B.A. degree. The major consists of 42 hours of English beyond freshman English composition.
An OC graduate with a Bachelor of Arts degree in English will demonstrate:

1. Critical thinking skills.
2. Clear, correct, and effective communication in English.
3. Comprehension, interpretation, and evaluation of texts, including critical works and works of British, American, and World Literature in their cultural and historical context, with the use of various theoretical methodologies.
4. Basic skills in a foreign language.
5. Exploration of and contribution to the world of ideas.
6. Articulation of and engagement in the personal integration of faith and learning.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 9 HOURS FOUNDATION

ENGL-2223 Introduction to Writing About Literature
ENGL-3013 Literary Criticism
ENGL-4213 Studies in Shakespeare

## 9 HOURS ENGLISH LITERATURE

ENGL-3153 English Literature Survey I, 680-1600
ENGL-3253 English Literature Survey II, 1600-1780
ENGL-3353 English Literature Survey III, 1780-Present
6 HOURS AMERICAN LITERATURE
ENGL-3673 American Literature Survey I, Before 1865
ENGL-3773 American Literature Survey II,1865-Present

6 HOURS WORLD LITERATURE
$\begin{array}{ll}\text { ENGL-3123 } & \text { World Literature I, Classical to Renaissance } \\ \text { ENGL-3133 } & \text { World Literature II, Renaissance to Modern }\end{array}$
9 HOURS LITERATURE ELECTIVES
3000 -level or above
3 HOURS SENIOR CAPSTONE
ENGL-4733 Senior Capstone
6 HOURS SAME FOREIGN LANGUAGE
Take 6 hours of the same foreign language
PRE-LAW EMPHASIS
The course requirements for the English Pre-Law emphasis are the same as for the regular B.A. in English. However, students should consult with their advisors to determine which courses will best support the pre-law emphasis.

## UNIVERSITY CORE CURRICULUM:

B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS

| POLS-2113 | Introduction to <br> American Government |
| :--- | :--- |

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 6 HOURS
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \& Motion Pictures
COMM-2023 History of Theater
MUSC-2013 Music Appreciation MUSC-3213 Perspectives in World Music

BEHAVIORAL SCIENCE, 3 HOURS
PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regional Geography HIST-2613 The Modern Middle East MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious Movements
MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.A. DEGREE IN ENGLISH/TEACHING ENGLISH AS A FOREIGN LANGUAGE 42 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

An OC graduate with a Bachelor of Arts degree in English/Teaching English as a Foreign Language will:

1. Demonstrate competence in teaching English as a foreign language either abroad or domestically.
2. Demonstrate comprehension of linguistics, grammar, intercultural communication, language learning theory, and teaching methodology.
3. Demonstrate the ability to think, read, and write critically, especially on issues related to language learning and teaching.
4. Demonstrate an awareness of and appreciation for the diversities among people around the world.
5. Engage in and articulate a personal integration of faith and learning.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 21 HOURS SPECIALIZED TEFL |  |
| :--- | :--- |
| ENGL-1331 | TEFL Experience I |
| ENGL-2332 | TEFL Experience II |
| ENGL-3313 | Introduction to Linguistics |
| ENGL-3713 | Structures of the English Language |
| ENGL-3723 | Methods of TEFL I |
| ENGL-4633 | Intercultural Communication I |
| ENGL-4713 | Methods of TEFL II |
| ENGL-4863 | TEFL Student Teaching Practicum |

## 3 HOURS ENGLISH GATEWAY

ENGL-2223 Introduction to Writing About Literature
This course must be completed before enrolling in upper level Literature courses.

9 HOURS 3000 LEVEL OR ABOVE LITERATURE TAUGHT IN ENGLISH
3 HOURS SENIOR CAPSTONE
ENGL-4733 Senior Capstone

6 HOURS CHOSEN FROM THE FOLLOWING
ENGL-3493 Technical Writing
ENGL-4113 Studies in Chaucer
ENGL-4213 Studies in Shakespeare
GEOG-2113 Elements of Human Geography
GEOG-2213 World Political Geography
HIST-2513 English History to 1603
HIST-2523 English History Since 1603
HIST-2923 Perspectives in Western Civilization
HIST-3133 Latin American People
HIST-3143 Civilizations of the Pacific Rim
SOCI-3513 World Religions
SOCI-3613 Cultural Anthropology
6 HOURS SAME FOREIGN LANGUAGE
Take 6 hours of the same foreign language

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS

## ENGL-1113 English Composition I

ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL S POLS-2113 | CIENCE, 3 HOURS <br> Introduction to American Government |
| AMERICAN HIST-1223 | HISTORY, 3 HOURS <br> Turning Points in U.S. History |
| GREAT WORK | KS, 6 HOURS |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 | History of Photography \& Motion Pictures |
| COMM-2023 | History of Theater |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS
HIST-2923 $\quad$ Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human
GEOG-2213 Geography
World Regional Geography
The Modern Middle Eas
MISS-3613 World Religions
MISS-3673 Cultural Anthropology
$\begin{array}{ll}\text { MISS-3673 } & \text { New Religious Movements } \\ \text { MUSC-3213 } & \text { Perspectives in World Music }\end{array}$
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.A. DEGREE IN ENGLISH/WRITING 42 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The B.A. degree in English/Writing is designed to develop professional writing skills to prepare graduates for a variety of careers. Since writing well is essential in business and education, and since many graduate and professional schools demand exceptional composition skills, many students will want to combine a major or minor with other professional training.

An OC graduate with a Bachelor of Arts degree in English/Writing will:

1. Think both critically and creatively.
2. Demonstrate the ability to understand, interpret, and evaluate works of literature (from the earliest texts to current best sellers), as well as his or her own work.
3. Demonstrate competence in various types of writing that prepares him or her for graduate school and/or a job in technical writing, editing, creative writing, journalistic writing, and countless other types of professional writing.
4. Demonstrate the awareness of the power of words and language and the responsibility that accompanies the ability to use words and language in a positive way.
5. Demonstrate an awareness of and appreciation for the diversities among people across the globe.
6. Embrace and articulate personal integration of faith and learning.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 3 HOURS ENGLISH GATEWAY |  |
| :---: | :---: |
| ENGL-2223 | Introduction to Writing About Literature |
| This course must be completed before enrolling in upper level Literature courses. |  |
| 6 HOURS CREATIVE WRITING |  |
| ENGL-3523 | Creative Writing I |
| ENGL-3533 | Creative Writing II |
| 3 HOURS ADVANCED WRITING |  |
| ENGL-3813 | Advanced Writing |
| 3 HOURS TECHNICAL WRITING |  |
| ENGL-3493 | Technical Writing |
| 12 HOURS 3000 OR ABOVE LEVEL LITERATURE COURSES |  |
| 6 HOURS GRAMMAR AND LINGUISTICS |  |
| ENGL-3313 | Introduction to Linguistics |
| ENGL-3713 | Structures of the English Language |


| 6 HOURS JOURNALISM CHOSEN FROM |  |
| :--- | :--- |
| COMM-2113 | Writing for Media |
| COMM-2723 | Scriptwriting for Television and Movies |
| COMM-3233 | Managing Social Media |
| COMM-3823 | Feature Writing |
| ENGL-4873 | Writing Internship |
| 3 HOURS SENIOR CAPSTONE  <br> ENGL-4733 Senior Capstone <br> 6 HOURS FOREIGN LANGUAGE  <br> Take 6 hours of the same foreign language  l |  |

Take 6 hours of the same foreign language

UNIVERSITY CORE CURRICULUM:
B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History
GREAT WORKS, 6 HOURS
ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \& Motion Pictures
COMM-2023 History of Theater
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music

SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

WESTERN CIVILIZATION, 3 HOURS
HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regional Geography HIST-2613 The Modern Middle East
MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious Movements
MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## B.A. DEGREE IN SPANISH <br> 30 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The Spanish major must meet all general requirements for the B.A. degree. The major consists of 30 hours of Spanish beyond Basic Spanish I and II.
An OC graduate with a Bachelor of Arts degree in Spanish will:

1. Demonstrate proficiency in speaking, reading, and writing in the Spanish language to participate in fluid conversations with native speakers of Spanish, read and understand prose and poetry in the target language, and write research papers and essays in Spanish.
2. Have an awareness and appreciation of the cultures of Spanish-speaking countries including the customs, religion, and general way of life of their own country as it compares with that of Spanish speaking countries and important Hispanic authors, movements, and historical events.
3. Have familiarity with the structure of the Spanish language, including the grammar of their native language as it compares with that of Spanish, and have the ability to use all verb tenses in Spanish interchangeably.
4. Engage in and articulate a personal integration of faith and learning.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 9 HOURS LITERATURE

SPAN-3213 Spanish Literary Readings
SPAN-4113 Studies in Spanish Literature
SPAN-4213 Studies in Latin American Literature
3 HOURS ADVANCED CONVERSATION AND GRAMMAR

## 3 HOURS HISPANIC CIVILIZATION

SPAN-3223 Hispanic Civilization
9 HOURS 2000/3000/4000 SPANISH ELECTIVES

## 3 HOURS SPANISH IMMERSION LAB

SPAN-4711 Spanish Immersion Lab
This course must be taken three times.

## 3 HOURS SENIOR CAPSTONE

## ENGL-4733 Senior Capstone

Successful completion of Senior Capstone meets the requirements for all strands of Language and Literature majors.

## 6 HOURS FOREIGN LANGUAGE

Take 6 hours of the same foreign language other than Spanish.
A student majoring in Spanish should work with his or her advisor to select the minor that will be most beneficial. Art, history, international studies, and communication are often beneficial to a Spanish major.

## FOREIGN LANGUAGE PROFICIENCY

The necessary courses for foreign language proficiency in a particular language include those required for the student's preferred degree plus a minimum of 12 hours in the same foreign language, or the equivalent of courses up through Intermediate II in the same language. Students will be required to participate in a university approved field experience, which will include some sort of immersion into the language for which a student seeks a proficiency credit, after taking a minimum of 6 hours in the language. The student must write a one-page description of his or her time abroad explaining how he or she will use this language and have it approved by the Language and Literature Department PRIOR to departure. In addition, the student must indicate a sponsor who will verify (after the student's return) his/her use of the target language. Practicum requirements may be accomplished by taking part in a spring break or summer mission trip to a country where this language is predominate.

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

CAPSTONE, 3 HOURS

| BIBL-4523 | Capstone: Christ and His <br> World |
| :--- | :--- |
| POLITICAL SCIENCE, 3 HOURS <br> POLS-2113 Introduction to <br> American Government  |  |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History <br> GREAT WORKS, 6 HOURS  |  |
| ARTS-2013 Survey of Visual Culture <br> ARTS-2423  <br> COMM-2023 Motion Pictures <br> History of Theater  <br> ENGL-2213 English Literature <br> MUSC-2013 Music Appreciation <br> MUSC-3213 Perspectives in World Music |  |

## SCIENCE, 6 HOURS

BEHAVIORAL SCIENCE, 3 HOURS PSYC-1113 General Psychology I

## WESTERN CIVILIZATION, 3 HOURS HIST-2923 Perspectives in Western Civilization

NON-WESTERN CIVILIZATION, 3 HOURS
GEOG-2113 Elements of Human Geography
GEOG-2213 World Regional Geography HIST-2613 The Modern Middle East
MISS-3513 World Religions
MISS-3613 Cultural Anthropology
MISS-3673 New Religious Movements
MUSC-3213 Perspectives in World Music

## B.S.E. DEGREE IN ENGLISH EDUCATION 73 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

The major is designed for those who plan careers in middle, junior, or senior high school teaching. A student in this degree program must have two advisors, one in English and one in education. The student must meet all the requirements for the Bachelor of Science in Education degree, including a minor in Professional Education and 40 hours in the major beyond Freshman Composition.

An OC graduate with a Bachelor of Science in Education degree in English Education will:

1. Through extensive writing, research, presentations, class discussion, and testing demonstrate critical thinking skills, clear, correct, and effective communication in English, comprehension, interpretation, and evaluation of texts including critical works and works of British, American, and World Literature in their cultural and historical context, with the use of various theoretical methodologies, skills in applying the essential concepts of English structure and linguistics, basic skills in a foreign language (BSE - two years in high school; BA - 6 hours), exploration of and contribution to the world of ideas, and articulation of and engagement in the personal integration of faith and learning.
2. Show that he or she has acquired competency in a broad general education through study in the liberal arts by successfully completing the university core curriculum and passing the Oklahoma General Education Test (OGET).
3. Demonstrate an in-depth knowledge of English language and literature by achieving a 3.00 GPA in the specified major courses required for certification in English and passing the Oklahoma Subject Area Test (OSAT) in English.
4. Demonstrate that he or she has acquired the knowledge, skills, and dispositions appropriate for initial entry into the profession of teaching by completing a specified curriculum in professional education courses with no grades below a grade of " $C$ ", passing the Oklahoma Professional Teacher Education Exam (OPTE), and receiving average ratings of Proficient on the Formative and Summative assessments in student teaching.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 3 HOURS ENGLISH GATEWAY

ENGL-2223 Introduction to Writing About Literature
This course must be completed before enrolling in upper level Literature courses.

## 3 HOURS GRAMMAR AND COMPOSITION

ENGL-3713 Structures of the English Language
3 HOURS LINGUISTICS
ENGL-3313 Introduction to Linguistics
6 HOURS AMERICAN LITERATURE
ENGL-3673 American Literature Survey I, Before 1865
ENGL-3773 American Literature Survey II,1865-Present
3 HOURS LITERARY CRITICISM
ENGL-3013 Literary Criticism
9 HOURS ENGLISH LITERATURE
ENGL-3153 English Literature Survey I,680-1600
ENGL-3253 English Literature Survey II, 1600-1780
ENGL-3353 English Literature Survey III,1780-Present
3 HOURS WORLD LITERATURE CHOSEN FROM
ENGL-3123 World Literature, Classical to Renaissance
ENGL-3133 World Literature, Renaissance to Modern
3 HOURS SHAKESPEARE
ENGL-4213 Studies in Shakespeare

3 HOURS SENIOR CAPSTONE
ENGL-4733 Senior Capstone
4 HOURS ELECTIVES FROM THE FOLLOWING AREAS
Speech, Journalism, Drama
PROFESSIONAL EDUCATION
25 SEMESTER HOURS PROFESSIONAL EDUCATION
EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations and Behavior Management
EDUC-4131 Applied Instructional and Assessment Strategies
EDUC-4132 Critical Issues in Education
EDUC-4718 Student Teaching in the Secondary Schools

## 5 HOURS OTHER COURSES

EDUC-4112 Literacy in the Secondary Content Areas
PSYC-3523 Developmental Psychology
3 HOURS METHODS
EDUC-4553 Methods of Teaching Language Arts in Sec. Schools
FOREIGN LANGUAGE COMPETENCY; CHOOSE ONE:
High School Foreign Language -2 years of same language with a grade of " C " or better
University credit - 3 hours foreign language, American Sign Language with a grade of " C " or better.

## UNIVERSITY CORE CURRICULUM:

## B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

## BIBLE ELECTIVE, 5 HOURS

5 hours of Bible courses, except Missions Experience

CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to
American Government
AMERICAN HISTORY, 3 HOURS
HIST-1223 Turning Points in U.S. History

## GREAT WORKS, 3 HOURS

ARTS-2013 Survey of Visual Culture ARTS-2423 History of Photography \& Motion Pictures
COMM-2023 History of Theater
MUSC-2013 Music Appreciation
MUSC-3213 Perspectives in World Music
SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 6 HOURS
PSYC-1113 General Psychology I
PSYC-3523 Developmental Psychology

## LIBERAL ARTS, 6 HOURS

6 hours from any Liberal Arts area, other than current major
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25.

## DEPARTMENT OF

MUSIC

## AREAS OF STUDY

Music (MUSC)

## DEGREES OFFERED

B.A. Degree in Music
B.M.E. Degree in Music Education, Instrumental Emphasis
B.M.E. Degree in Music Education, Vocal Emphasis

## MINORS

Music

## FACULTY

Eric Colgrove, M.M., Instructor of Music
John Fletcher, D.M.A., Associate Dean, College of Liberal Arts, Professor of Music
Paula Hutton, Ph.D., Associate Professor of Music
Heath Jones, Ph.D., Department Chair of Music, Professor of Music
Kyle Pullen, D.M.A., Professor of Music

## LOCATION

Fletcher Center for Music
Garvey Center for the Liberal Arts

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC-121A

## SPECIAL REQUIREMENTS FOR ALL MUSIC MAJORS:

All prospective music majors must take placement exams in music fundamentals and piano. Credit may be earned for AP tests or previous study if their skills
meet departmental expectations.
All prospective music majors must audition in their major performance area during their second semester for official acceptance into a music degree program.

All music majors must enroll in MUSC-1000, Recital Attendance, each semester. A minimum grade of "C" must be earned in at least 6 of those semesters.

All music majors are required to audition for at least one approved ensemble each semester. Only four hours of credit will apply toward the degree program. The faculty may direct pianists to substitute accompanying for ensemble experience.

As a graduation requirement, students must pass the two sections of the Piano Proficiency Exam as described in departmental publications. The Repertoire section is given as the final exam for MUSC-2581 and the Functional Skills section is the final exam for MUSC-2681. Music majors should continue to enroll in class piano or applied piano each semester until the exam is successfully completed.

No music major will be permitted to participate in commencement exercises without having:

Passed the Piano Proficiency Exam.
Completed all requirements for the senior recital/senior project, MUSC-
4001/4011.
Each music major should consult the music department chair regarding the cut-off date after which the student will forfeit the opportunity to participate in upcoming commencement exercises should the stated requirements not yet be completed.

## B.A. DEGREE IN MUSIC <br> 51 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The B.A. degree in Music is for students desiring to study music in a liberal arts curriculum. In the tradition of a liberal arts education, this degree offers preparation for careers and graduate study not only in music, but in many other disciplines.

An OC graduate with a Bachelor of Arts degree in Music will demonstrate:

1. Ability to hear and analyze rhythm, melody, harmony, and form.
2. Ability to sight-read music and perform with other musicians.
3. Understanding of compositional and aesthetic properties of style and how the art of music is shaped by cultural forces.
4. Acquaintance with a wide selection of music literature beyond the student's specialization through lectures, assignments, and concert attendance
5. Ability to perform a cross-section of that repertory according to the student's interest and departmental standards.
6. Ability to communicate clearly, critically, and creatively about music.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 11 HOURS BASIC THEORY |  |
| :--- | :--- |
| MUSC-1112 | Music Theory I |
| MUSC-1211 | Ear Training II |
| MUSC-1212 | Music Theory II |
| MUSC-2111 | Ear Training III |
| MUSC-2112 | Music Theory III |
| MUSC-2211 | Ear Training IV |
| MUSC-2212 | Music Theory IV |
| 4 HOURS CLASS PIANO |  |
| MUSC-1581 | Class Piano I |
| MUSC-1681 | Class Piano II |
| MUSC-2581 | Class Piano III |
| MUSC-2681 | Class Piano IV |

## 9 HOURS MUSIC HISTORY

| MUSC-3323 | Music History I: Ancient Music through the |
| :--- | :--- |
| MUSC-3333 | Renaissance |
| Music History II, Baroque and the Classical Music |  |
| MUSC-3343 | Music History III, Romantic Music and Contemporary |
|  | Music |



UNIVERSITY CORE CURRICULUM:
B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| Appropriate to major |  |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old Testament |
| BIBL-2302 | Story of the New Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |


| CAPSTONE, 3 HOURS  <br> BIBL-4523 Capstone: Christ and His <br> World <br> POLITICAL  |  |
| :--- | :--- |
| SCIENCE, 3 HOURS  <br> POLS-2113 Introduction to <br> American Government <br> AMERICAN HISTORY, 3 HOURS  |  |
| HIST-1223 Turning Points in U.S. History <br> GREAT WORKS, 6 HOURS  <br> should include literature  |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  <br> Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 | Perspectives in Literature |
| :---: | :---: |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORA PSYC-1113 | SCIENCE, 3 HOURS General Psychology I |
| WESTERN <br> HIST-2923 | VILIZATION, 3 HOURS Perspectives in Western Civilization |
| NON-WESTE GEOG-2113 | RN CIVILIZATION, 3 HOURS Elements of Human Geography |
| GEOG-2213 | World Regional Geography |


| HIST-2613 | The Modern Middle East |
| :--- | :--- |
| MISS-3513 | World Religions |
| MISS-3613 | Cultural Anthropology |
| MISS-3673 | New Religious Movements |
| MUSC-3213 | Perspectives in World Music |
|  |  |
| *For more information on how to apply study <br> abroad trips to the core curriculum, see the <br> chart on page 25 |  | abroad trips to the core curriculum, see the chart on page 25

## B.M.E. DEGREE IN MUSIC/INSTRUMENTAL EMPHASIS, 83 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

The B.M.E. degree is for students pursuing a teaching career in music. The degree provides the student with the necessary coursework required for the standard teaching certificate as outlined by the Oklahoma State Department of Education.

An OC graduate with a Bachelor of Music Education with a music/instrumental emphasis will demonstrate:

1. Ability to hear and analyze rhythm, melody, harmony, and form.
2. Ability to sight-read music and perform with other musicians.
3. Understanding of compositional and aesthetic properties of style and how the art of music is shaped by cultural forces.
4. Acquaintance with a wide selection of music literature beyond the student's interest and departmental standards.
5. Ability to perform a cross-section of that repertory according to the student's interest and departmental standards.
6. Ability to communicate clearly, critically, and creatively about music.
7. Ability to plan and teach elementary and secondary general music effectively.
8. Ability to conduct ensembles and rehearse instrumental music effectively.
9. Organizational leadership skills for management of instrumental ensembles in the public schools.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


## B.M.E. DEGREE IN MUSIC/VOCAL EMPHASIS, 84 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

The B.M.E. degree is for students pursuing a teaching career in music. The degree provides the student with the necessary coursework required for the standard teaching certificate as outlined by the Oklahoma State Department of Education.

An OC graduate with a Bachelor of Music Education degree with a music/vocal emphasis will demonstrate:

1. Ability to hear and analyze rhythm, melody, harmony, and form.
2. Ability to sight-read music and perform with other musicians.
3. Understanding of compositional and aesthetic properties of style and how the art of music is shaped by cultural forces.
4. Acquaintance with a wide selection of music literature beyond the student's interest and department standards.
5. Ability to perform a cross-section of that repertory according to the student's interest and departmental standards.
6. Ability to communicate clearly, critically, and creatively about music.
7. Ability to plan and teach elementary and secondary general music effectively.
8. Ability to conduct ensembles and rehearse vocal music effectively.
9. Organizational leadership skills for management of vocal ensembles in the public schools.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.


| 8 HOURS VOICE |  |
| :---: | :---: |
| 4 HOURS MUSIC ENSEMBLE (1300-1400 LEVEL COURSES) |  |
| 1 HOUR CAPSTONE PROJECT OR RECITAL |  |
| MUSC-4001 | Senior Recital |
| MUSC-4011 | Senior Project |
| 23 HOURS PROFESSIONAL EDUCATION |  |
| EDUC-3121 | Orientation to Teacher Education |
|  | The School in American Culture |
| EDUC-3131 | Classroom Management Strategies |
| EDUC-3213 | Learning, Instruction, and Assessment |
| EDUC-3723 | Education of the Exceptional Child |
| EDUC-4012 <br> EDUC-4131 | Human Relations and Behavior Management |
|  | Applied Instructional and Assessment Strategies |
| EDUC-4132 | Critical Issues in Education |
| EDUC-4818 | Student Teaching in the Elementary and |
|  | Secondary Schools |
| 3 HOURS OF PSYCHOLOGY |  |
| PSYC-3523 | Developmental Psychology, used in core |
| 4 HOURS MUSIC METHODS |  |
| EDUC-4422 | Elementary Music Methods |
| EDUC-4442 | Secondary Vocal Music Methods |
| FOREIGN LANGUAGE COMPETENCY |  |
| Choose One: |  |
| High School Foreign Language -2 years of same language with a grade of " C " or better |  |
| University credit - 3 hours foreign language or American Sign Language with a grade of "C" or better |  |

UNIVERSITY CORE CURRICULUM:
B.M.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOUR

ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

GREAT WORKS, 3 HOURS
used in major
MUSC-3323 Music History I: Ancient Music Through the Renaissance MUSC-3333 Music History II: Baroque and the Classical Music and the Classical Music
Music History III: Romantic and Contemporary Music

SCIENCE, 6 HOURS
BEHAVIORAL SCIENCE, 6 HOURS
used in major
PSYC-1113 General Psychology I PSYC-3523 Developmental Psychology

GREAT WORKS, ADDITIONAL, 3 HOURS
ARTS-2013 Intro to Visual Arts
COMM-2023 History of Theate ENGL-2213 English Literature

NON-WESTERN CIVILIZATION, 3 HOURS MUSC-3213 Perspectives in World Music
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## DEPARTMENT OF

## PSYCHOLOGY \& FAMILY SCIENCE

## AREAS OF STUDY

Human Development (CHDV)
Family Science (FMST)
Psychology (PSYC)
Sociology (SOCI)
DEGREES OFFERED
B.A. Degree in Psychology
B.S. Degree in Family Science
B.S. Degree in Family Science/Human Development
B.S. Degree in Psychology

## MINORS

Family Science
Human Development
Psychology
FACULTY
Bobby L. Kern, Ph.D., Associate Professor of Psychology and Family Science Ryan Newell, Ph.D., Department Chair of Psychology and Family Science, Professor of Psychology
Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology

## LOCATION

Davisson American Heritage Building

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC-121A

## B.A. DEGREE IN PSYCHOLOGY <br> 43 HOURS, MINOR REQUIRED, PLUS 6 HOURS OF SAME FOREIGN LANGUAGE

The B.A. degree in Psychology emphasizes a strong general education in the field of psychology for students who may not want to go on for graduate work. The department recognizes that graduate school is not for everyone and also recognizes the value of having a general liberal arts degree. Enough preparatory classes are required in the B.A. degree that if a student later decides to seek admission into a graduate school, only a small number of leveling courses will typically be required.

An OC graduate with a Bachelor of Arts degree in Psychology will:

1. Demonstrate familiarity with the vocabulary of the systems of psychology.
2. Develop basic literature review skills and writing skills necessary to gain admission into graduate school.
3. Become involved in some form of community service.
4. Have GRE scores adequate for admission to most regional universities.
5. Demonstrate spiritual development and service to the church.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 28 HOURS PSYCHOLOGY

PSYC-1113 General Psychology I
PSYC-1211 Introductory Seminar in Psychology
PSYC-2223 General Psychology II
PSYC-3113 Introductory Psychological Statistics
PSYC-3313 Abnormal Psychology
PSYC-3413 Social Psychology
PSYC-3713 Personality
PSYC-4413 Biological Psychology
PSYC-4623 Experimental Psychology
PSYC-4713 History and Systems in Psychology

3 HOURS CHOSEN FROM
PSYC-3523 Developmental Psychology
PSYC-3543 Adult Development and Aging
12 HOURS PSYCHOLOGY ELECTIVE
6 HOURS SAME FOREIGN LANGUAGE
Note: MATH-1213 College Algebra in the core curriculum is strongly recommended.

## UNIVERSITY CORE CURRICULUM: <br> B.A. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
Appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Act
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience

| CAPSTONE, <br> BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U |  |
|  |  |


| GREAT WORKS, 6 HOURS |  |
| :--- | :--- |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |
| MUSC-3213 | Perspectives in World Music |
| SCIENCE, 6 HOURS |  |
| BEHAVIORAL SCIENCE, 3 HOURS |  |
| Used in major  <br> PSYC-1113 General Psychology I |  |

## B.S. DEGREE IN FAMILY SCIENCE <br> 57 HOURS

The B.S. degree in Family Science is a pre-professional degree that emphasizes preparation for graduate school. Students who wish to pursue advanced degrees, either a master's degree or doctorate, are encouraged to pursue this degree rather than the B.S. degree in Family Science/Child Development. With the growth of marriage and family graduate school programs, and the increasing influence of systems theory in psychology, the need to prepare students for study as marriage and family counselors is increasing.

An OC graduate with a Bachelor of Science degree in Family Science will:

1. Demonstrate knowledge of the dynamic nature of the family and of the conceptual framework on which current family relations theories are based.
2. Exhibit professional development in the research field by presenting an experimental research project at a state level conference.
3. Demonstrate a knowledge of various cultures and family structure types in our society.
4. Demonstrate knowledge of career opportunities applicable to Family Science majors on the bachelor and graduate degree levels.
5. Have GRE scores adequate for admission to most regional universities.
6. Gain admission to a graduate school commensurate to GPA and GRE scores.
7. Demonstrate spiritual development and service to the church.
8. Develop an international perspective that encourages appreciation of individual differences.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 24 HOURS FAMILY SCIENCE

FMST-1113 Introduction to Family Science
FMST-2423 Parent-Child Relations
FMST-3523 Human Sexuality
FMST-3933 Cybernetics and Systems Theory
FMST-4123 Divorce and Stepfamily Relationships
FMST-4323 Introduction to Marital and Family Therapy
FMST-4653 Research Seminar
(must be passed with a grade of C or better)
FMST-4713 Family Science Practicum

## 3 HOURS CHOSEN FROM

| FMST-3723 | Gerontology |
| :--- | :--- |
| PSYC-3523 | Developmental Psychology |

## 3 HOURS CHOSEN FROM

FMST-3613 Adolescence and Early Adulthood
FMST-3913 Family Development

## 6 HOURS FAMILY SCIENCE ELECTIVES

## 15 HOURS PSYCHOLOGY

PSYC-1113 General Psychology I
PSYC-3113 Introductory Psychological Statistics
PSYC-3213 Advanced Psychological Statistics
PSYC-3313 Abnormal Psychology
PSYC-4623 Experimental Psychology
6 HOURS PSYCHOLOGY ELECTIVES
All students completing this degree will be required to take the GRE general test the semester prior to graduating (example: if you plan to graduate in the spring, the test must be taken during the fall semester) and have one copy of the scores sent to OC. The cost of this exam will be the student's responsibility.

Note: As of September 2018, the cost for the GRE was $\$ 160$.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New
Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, |
| :--- |
| BIBL-4523 |
| HOURS |
| Capstone: Christ and His |
| World |

WOLITICAL


## B.S. DEGREE IN FAMILY SCIENCE/HUMAN DEVELOPMENT 48 HOURS, MINOR REQUIRED

This degree has as its emphasis a strong general education in the field of Family Science/Human Development and provides students with a broad, general approach to the study of the family. This degree is primarily intended for those students who do not wish to pursue graduate school.

An OC graduate with a Bachelor of Science degree in Family Science/Human Development will:

1. Demonstrate knowledge of the dynamic nature of the family and of the conceptual framework on which current family relations theories are based.
2. Gain approval as a Certified Family Life Educator (CFLE).
3. Demonstrate a knowledge of various cultures and family structure types in our society.
4. Demonstrate knowledge of career opportunities applicable to Family Science majors on the bachelor's level.
5. Demonstrate spiritual development and service to the church.
6. Develop an international perspective that encourages tolerance and appreciation of individual differences.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 30 HOURS FAMILY SCIENCE

| BIBL-3453 | Personal and Family Finance |
| :--- | :--- |
| COMM-3353 | Interpersonal Communication |
| FMST-1113 | Introduction to Family Science |
| FMST-2423 | Parent-Child Relations |
| FMST-3513 | Child Welfare |
| FMST-3523 | Human Sexuality |
| FMST-3533 | Family Life Education |
| FMST-4123 | Divorce and Stepfamily Relationships |
| FMST-4713 | Family Science Practicum |
| FMST-4733 | Professional, Ethical and Legal Issues |

12 HOURS IN HUMAN DEVELOPMENT CHOSEN FROM
CHDV-301
Nature and Characteristics of the Preschool and Primary Age Child
CHDV-4023 Topics in Early Childhood
FMST-3613 Adolescence and Early Adulthood
FMST-3723 Gerontology
FMST-3913 Family Development
PSYC-3523 Developmental Psychology
A MINOR IN PSYCHOLOGY IS HIGHLY RECOMMENDED.

6 HOURS FAMILY SCIENCE ELECTIVES

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| appropriate to major |  |
| REQUIRED BIBLE, 8 HOURS |  |
| $\begin{aligned} & \text { BIBL-1212 } \\ & \text { BIBL-1312 } \end{aligned}$ | Life of Christ: Matthew |
|  | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
|  | Testament |
| BIBL-2302 | Story of the New |
|  | Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

CAPSTONE, 3 HOURS
CIBL-4523
Capstone: Christ and His
World

| NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :--- | :--- |
| GEOG-2113 | Elements of Human |
| Geography |  |

## B.S. DEGREE IN PSYCHOLOGY <br> 58 HOURS

The B.S. degree is a pre-professional degree that emphasizes preparation for graduate school. Students who wish to pursue a master's degree or doctoral degree are encouraged to pursue the B.S. degree.

An OC graduate with a Bachelor of Science degree in Psychology will:

1. Demonstrate analytical and critical thinking through completion of a research project and presenting that project at a state or regional conference.
2. Develop skills in writing in scientific psychology.
3. Gain admission to graduate school commensurate to GPA and GRE scores.
4. Demonstrate familiarity with the vocabulary of the systems of psychology.
5. Demonstrate spiritual development and service to the church.
6. Become involved in some form of community service.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 34 HOURS REQUIRED PSYCHOLOGY

PSYC-1113 General Psychology I
PSYC-1211 Introductory Seminar in Psychology
PSYC-3113 Introductory Psychological Statistics
PSYC-3213 Advanced Psychological Statistics
PSYC-3313 Abnormal Psychology
PSYC-3413 Social Psychology
PSYC-3713 Personality
PSYC-4213 Psychology of Learning
PSYC-4413 Biological Psychology
PSYC-4623 Experimental Psychology
PSYC-4653 Research Seminar
PSYC-4713 History and Systems in Psychology

## 3 HOURS CHOSEN FROM

| PSYC-3523 | Developmental Psychology |
| :--- | :--- |
| PSYC-3723 | Adult Development and Aging |

18 HOURS PSYCHOLOGY ELECTIVES

## 3 HOURS MATHEMATICS

MATH-1213 College Algebra
All students completing this degree will be required to take the GRE general test the semester prior to graduating (example: if you plan to graduate in the spring. the test must be taken during the fall semester) and have one copy of the scores sent to OC. The cost of this exam will be the student's responsibility.

Note: As of September 2018 the cost for the GRE was $\$ 160$.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
|  | Testament |
| BIBL-2302 | Story of the New |
|  | Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

COMMUNICATION, 9 HOURS
English Composition I
ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
appropriate to major

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament

BIBLE ELECTIVE, 5 HOURS
Experience

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |
| GREAT WORKS, 3 HOURS |  |
|  |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |
| :---: | :---: |
| MUSC-2013 Music Appreciation | GEOG-2113 Elements of Human |
| MUSC-3213 Perspectives in World | Geography |
| Music | GEOG-2213 World Regional |
|  | Geography |
| SCIENCE, 6 HOURS | HIST-2613 The Modern Middle East |
|  | MISS-3513 World Religions |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: | MISS-3613 Cultural Anthropology |
|  | MISS-3673 New Religious |
| BEHAVIORAL SCIENCE, 3 HOURS | M Movements |
| used in major | MUSC-3213 Perspectives in World |
| PSYC-1113 General Psychology I |  |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left | LIBERAL ARTS, 3 HOURS outside major, as approved by department |
|  |  |
| WESTERN CIVILIZATION, 3 HOURS HIST-2923 Perspectives in Western Civilization | *For more information on how to apply the study abroad trips to the core curriculum see page 25. |
|  |  |
|  |  |

## SCHOOL OF EDUCATION

## DEPARTMENT OF

## TEACHER EDUCATION

## AREAS OF STUDY

Early Childhood Education (ECED)
Education (EDUC)
Elementary Education (ELEM)

## DEGREES OFFERED

B.S.E. Degree in Early Childhood Education
B.S.E. Degree in Elementary Education

SECONDARY (LICENSURE, GRADES 6-12)
(see respective departments for details)
B.S.E. Degree in English
B.S.E. Degree in Mathematics
B.S.E. Degree in Science
B.S.E. Degree in Social Studies

ELEMENTARY-SECONDARY (LICENSURE PK-12)
(see respective departments for details)

## MINORS

Professional Education (included with each B.S.E. degree)

## FACULTY

Elayne Bowman, Ph.D., Associate Professor of Education
Allison Cassady, Ph.D., Associate Professor of Education
Kelli Dudley, M.S.Ed., Instructor of Education
Joanie Gieger, M.S.Ed., Visiting Instructor of Education
Darin Martin, Ed.D., Chair of School of Education,
Professor of Education

## LOCATION

Davisson American Heritage Building

## DEAN

Tina Winn, Ed.D., Dean of the College of Liberal Arts, Professor of Psychology John Fletcher, Associate Dean of the College of Liberal Arts, Professor of Music

DEAN'S OFFICE
GC-121A

## TEACHER EDUCATION

The Teacher Education program is designed to ensure that teacher candidates develop a strong foundation in the liberal arts, a sound knowledge of their discipline, an understanding of how students learn, and a reasonable mastery of communication skills.

Preparation of effective classroom teachers has long been recognized as a strength of OC. The Teacher Education program has a history of excellent results, including high pass rates on state certification exams and high placement rates for graduates.

The Teacher Education program is approved by the Oklahoma Office of Educational Quality and Accountability. The unit is accredited by the National Council for Accreditation of Teacher Education (NCATE) and OC has been a NCATE accredited institution since 1972. The Teacher Certification Process is as follows:

STEP 1: ADMISSION TO TEACHER EDUCATION
After candidates have completed three semesters of work, they should apply for admission to Teacher Education, at which time a first check of character and scholarship will be made.

## REQUIREMENTS FOR ADMISSION TO TEACHER EDUCATION

- Forty-five semester hours of credit with a GPA of 2.75 .
- Grade of "C" or better in EDUC-3121 and EDUC 3122 (must have a GPA of 2.65 to enroll).
- Recommendation of major department.
- Recommendation of the Office of Student Life.
- Satisfactory completion of the Teacher Education Writing Evaluation.
- Grade of "C" or better in COMM-1213.
- Recommendation of Teacher Education Interview Committee.
- A written paper and oral presentation of your reasons for wanting to enter the profession, presented to the Teacher Education Interview Committee.
- One character reference.
- Successful completion of OGET (required in program) or 3.0 GPA on 20 hours selected liberal arts courses, which delays the OGET for one semester.
- Satisfactory portfolio review.
- Documentation of successful participation in working with age level matching that of certification sought (PK-3, 6-12, PK-12). This is completed in Field Experience - EDUC-3121.


## APPROVAL OF TEACHER EDUCATION COUNCIL

Note: Changes in teacher licensure requirements made by the state of Oklahoma may require that changes be made in the Teacher Education program at OC.

Students will apply for admission to Teacher Education early in the semester in which they are enrolled in EDUC-3121: Orientation to Teacher Education. Applications will be processed during that semester; those admitted to candidacy at the end of the semester will be notified and able to proceed in the Teacher Education program

To continue in Teacher Education, teacher candidates must maintain a cumulative GPA of 2.75 and a grade of " $C$ " or better in all education courses. Students who fall below minimum requirements will not be able to continue in the Teacher Education program until the requirements are again met. Candidates should confer with their advisors and/or the chair of the School of Education to develop a plan to meet all teacher education requirements.

PACE (Professional and Character Excellence) assessments are completed for all candidates enrolled in professional education courses each semester and for candidates in courses taught by members of the Teacher Ed. Council (content area professors). Candidates are assessed using an instrument, PACE Assessment in Education courses, on the following traits:

- Approaches teaching with positive and enthusiastic participation.
- Meet deadlines, works independently, and aims toward excellence.
- Demonstrates a Christian professional attitude with peers and School of Education personnel.
- Exemplifies mature behavior and emotional stability.
- Maintains punctual and regular attendance.

The rating is conducted using the standard School of Education rubric.

Teacher candidates who receive either three negative PACE reports in a row (3 semesters) or five negative PACE reports overall (individual courses) will be dismissed from the Teacher Education program. After a teacher candidate receives a negative rating, he/she will receive a probationary letter from the School of Education.

STEP 2: ADMISSION TO STUDENT TEACHING
Requirements for admission to student teaching are:

- Admission to Teacher Education.
- 95 semester hours of credit.
- Passing score on Oklahoma General Education Test (OGET).
- Passing score on the appropriate Oklahoma Subject Area Test (OSAT).
- Overall GPA of 2.75
- GPA of 3.00 in major.
- Completion of two-thirds of major hours (all courses in the major must be completed before student teaching begins.)
- Recommendation of major department.
- Recommendation of the Office of Student Life.
- Satisfactory completion of all field experiences.
- Fulfillment of the requirements for a foreign language, other than English, at the novice high level for listening and speaking. This requirement may be met by two years of the same foreign language in high school with a grade of " C " or better or three hours of college credit in a foreign language with a grade of "C" or better.
- Satisfactory portfolio review.
- Approval of the Teacher Education Council.


## STUDENT TEACHING

See "Teacher Education Handbook" and "Field Experiences Handbook" for guidelines, procedures, and requirements.

## STATE REQUIRED TESTS

All candidates for an Oklahoma teaching license must pass three exams. There are fees associated with each state test: Oklahoma General Education Test (OGET), Oklahoma State Subject Area Test (OSAT), and Oklahoma Professional Teaching Exam (OPTE). For testing information, visit www.ceoe. nesine.com

## STEP 3: APPROVAL FOR CERTIFICATION

To be recommended for a certificate, the candidate must complete student teaching and the appropriate Oklahoma Professional Teaching Exam (OPTE). After the teacher candidate has completed all requirements for graduation and certification, the candidate will create an account with the State Department of Education. The Department of Teacher Education at Oklahoma Christian will alert the state department that all requirements have been met for certification.

## B.S.E. DEGREE IN EARLY CHILDHOOD EDUCATION - 60 HOURS PROFESSIONAL EDUCATION MINOR INCLUDED

An OC graduate with a Bachelor of Science in Education degree will:

1. Show that he or she has acquired competency in a broad general education through study in the liberal arts by successfully completing the university core curriculum and passing the Oklahoma General Education Test (OGET).
2. Demonstrate an in-depth knowledge of the subject matter for the subject and level to be taught by achieving a 3.00 GPA in the major field and passing the Oklahoma Subject Area Test (OSAT) appropriate to the major field.
3. Demonstrate that he or she has acquired the knowledge, skills, and dispositions appropriate for initial entry into the profession of teaching by completing a specified curriculum in professional education courses with no grades below a grade of " C ", passing the Oklahoma Professional Teacher Education Exam (OPTE), and receiving average ratings of Proficient on the Formative and Summative assessments in student teaching.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 35 HOURS EDUCATION

ECED-3013 Nature and Characteristics of Early Childhood
ECED-4013 Cognitive Skills
ECED-4013P Cognitive Skills Practicum
ECED-4023 Topics in Early Childhood
ECED-4111 Early Childhood Practicum
ELEM-3023 Emergent Literacy
ELEM-3233 Primary Reading
ELEM-3233P Primary Reading Practicum
ELEM-3323 Movement and Fine Arts
ELEM-3332 Elementary Language Arts
ELEM-3632 Social Studies for the Primary Child
ELEM-3733 Mathematics for the Primary Child
ELEM-3832 Science for the Primary Child
ELEM-3900P Primary Practicum
ELEM-4544 Strategies for Reading Assessment
PSYC-3523 Developmental Psychology
Note: Practicum courses (P) do not affect the GPA and do not add to the semester course load. Grades earned in practicum courses reflect candidate performance in public school classrooms.

25 HOURS PROFESSIONAL EDUCATION
EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations
EDUC-4131 Applied Instruction and Assessment
EDUC-4132 Critical Issues in Education
EDUC-4618 Student Teaching in the Elementary School
FOREIGN LANGUAGE COMPETENCY:
Options: choose one:
High School Foreign Language -2 years of same language with a grade of " C " or better

University credit - 3 hours foreign language or American Sign Language with a grade of "C" or better.

48 HOURS GENERAL EDUCATION STATE REQUIREMENTS

| Communication | 12 hours |
| :--- | :--- |
| Mathematics | 12 hours |
| Science | 12 hours |
| Social Studies | 12 hours |

University core courses apply to these requirements.

UNIVERSITY CORE CURRICULUM:
B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
used in state requirements
ENGL-1113 English Composition I ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in state requirements
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience


## GREAT WORKS, 3 HOURS

used in state requirements ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

used in state requirements
PSYCHOLOGY, 6 HOURS
PSYC-1113 General Psychology I
PSYC-1113 General
Dev Psyc used in major
PSYC-3523 Developmental Psychology
LIBERAL ARTS, 6 HOURS CHOSEN FROM
6 hours (as approved by the department)
English, Fine Arts, History, Math, Science

## B.S.E. DEGREE IN ELEMENTARY EDUCATION - 60 HOURS PROFESSIONAL EDUCATION MINOR INCLUDED

An OC graduate with a Bachelor of Science in Education degree will:

1. Show that he or she has acquired competency in a broad general education through study in the liberal arts by successfully completing the university core curriculum and passing the Oklahoma General Education Test (OGET).
2. Demonstrate an in-depth knowledge of the subject matter for the subject and level to be taught by achieving a 3.00 GPA in the major field and passing the Oklahoma Subject Area Test (OSAT) appropriate to the major field.
3. Demonstrate that he or she has acquired the knowledge, skills, and dispositions appropriate for initial entry into the profession of teaching by completing a specified curriculum in professional education courses with no grades below a grade of "C", passing the Oklahoma Professional Teacher Education Exam (OPTE), and receiving average ratings of Proficient on the Formative and Summative assessments in student teaching.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 35 HOURS EDUCATION

ELEM-3023 Emergent Literacy
ELEM-3233 Primary Reading
ELEM-3233P Primary Reading Practicum
ELEM-3323 Movement and Fine Arts
ELEM-3332 Elementary Language Arts
ELEM-3632 Social Studies for Primary Students
ELEM-3733 Mathematics for Primary Students
ELEM-3832 Science for Primary Students
ELEM-3900P Primary Practicum
ELEM-4242 Social Studies for Intermediate Students
ELEM-4342 Mathematics for Intermediate Students
ELEM-4433 Intermediate Reading
ELEM-4443 Science for Intermediate Students
ELEM-4544 Strategies for Reading Assessment
ELEM-4900P Intermediate Practicum
PSYC-3523 Developmental Psychology
Note: Practicum courses (P) do not affect the GPA and do not add to the semester course load. Grades earned in practicum courses reflect candidate performance in public school classrooms.

## 48 HOURS GENERAL EDUCATION STATE REQUIREMENTS

| Communication | 12 hours |
| :--- | :--- |
| Mathematics | 12 hours |
| Science | 12 hours |
| Social Studies | 12 hours |

University core courses apply to these requirements

## 25 HOURS PROFESSIONAL EDUCATION MINOR

EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations
EDUC-4131 Applied Instruction and Assessment
EDUC-4132 Critical Issues in Education
EDUC-4618 Student Teaching in the Elementary School
FOREIGN LANGUAGE COMPETENCY
Options: choose one:
High School Foreign Language - 2 years of same language with a grade of "C" or better

University credit - 3 hours foreign language or American Sign Language with a grade of " $C$ " or better.

## UNIVERSITY CORE CURRICULUM: <br> B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS <br> used in state requirements

ENGL-1113 English Composition ENGL-1213 English Composition II COMM-1213 Oral Communication

MATHEMATICS, 3 HOURS
used in state requirements
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament

| BIBLE ELECTIVE, 5 HOURS <br> 5 hours of Bible courses, except Missions Experience |  |
| :---: | :---: |
| CAPSTONE, 3 HOURS <br> $\begin{array}{ll}\text { BIBL-4523 } & \begin{array}{l}\text { Capstone: } \text { Christ and His } \\ \text { World }\end{array}\end{array}$ <br> World |  |
|  |  |
| POLITICAL SCIENCE, 3 HOURS used in state requirements |  |
|  |  |
|  |  |
|  | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURSused in state requirements |  |
|  |  |
| HIST-1223 | Turning Points in U.S. History |

GREAT WORKS, 3 HOURS
used in state requirements
ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

used in state requirements
PSYCHOLOGY, 6 HOURS
PSYC-1113 General Psychology
Dev Psyc used in major
PSYC-3523 Developmental Psychology
LIBERAL ARTS, 6 HOURS CHOSEN FROM
6 hours (as approved by the department)
English, Fine Arts, History, Math, Science

## ART \& DESIGN

ART MINOR 21 HOURS
15 HOURS REQUIRED

| ARTS-1103 | Technology for Graphics |
| :--- | :--- |
| ARTS-1113 | Fundamentals of Drawing |
| ARTS-1213 | Figure Drawing |
| ARTS-1413 | Elements of Visual Thinking |
| ARTS-3113 | Printmaking |
| 3 HOURS CHOSEN FROM |  |
| ARTS-2513 Painting I <br> ARTS-3523 Illustration I <br>   <br> 3 HOURS ART HISTORY REQUIRED  <br> ARTS-3343 Ancient to Modern Art History <br> ARTS-3353 Contemporary Art <br>   <br> COMMUNICATION DESIGN MINOR 21 HOURS  <br> ARTS-1103 Technology for Graphics <br> ARTS-1413 Elements of Visual Thinking <br> ARTS-2223 Introduction to Communication Design <br> ARTS-2233 Type as Visual Language <br> ARTS-2323 Digital Design for Print <br> ARTS-3243 Graphic Design <br> ARTS-3263 Advanced Graphic Design |  |

Note: For B.S.E. candidates seeking a teaching minor in art, the addition of ARTS-2013: Survey of Visual Culture, which fulfills the fine arts appreciation requirement in the core curriculum, will allow this minor to meet the Oklahoma Provisional Level 1 course requirements.

INTERIOR ARCHITECTURE MINOR 18 HOURS
15 HOURS REQUIRED

| ARTS-1623 | Introduction to Interior Design |
| :--- | :--- |
| ARTS-1643 | Interior Textiles, Materials, and Finishes |
| ARTS-1653 | Computer Aided Design |
| ARTS-2623 | Residential Interior Design |
| ARTS-2663 | Architectural Graphics for Interior Design |
|  |  |
| 3 HOURS DESIGN  <br> ARTSTSTSY Chosen FROM  <br> ARTS-3633 Historic Interior Design, Antiquity to 1850 <br>  Contemporary Interior Design, 1850 to present |  |

## COMMUNICATION

## COMMUNICATION STUDIES MINOR 18 HOURS

 18 HOURS SPEECH COMMUNICATIONIncluding at least six hours numbered 3000 or above
Not more than 3 hours of 1300 level courses may count toward the minor. May not include COMM-1213.

## DRAMA MINISTRY MINOR 18 HOURS

2 HOURS REQUIRED
YTMN-4122 Media, Culture, and Adolescents
Students required to complete this course for a major must select another upper division text-based Bible (BIBL) course.

## 1 HOUR CHOSEN FROM

COMM-4831 Communication Practicum
COMM-4901 Independent Study in Communication

## 6 HOURS THEATER

6 hours from Communication Department as approved by advisor

3 HOURS BIBLE CHOSEN FROM

| BIBL-3203 | Biblical Exegesis |
| :--- | :--- |
| BIBL-3013 | Hermeneutics |

6 HOURS BIBLE CHOSEN FROM

| BIBL-3002 | Genesis to Exodus |
| :--- | :--- |
| BIBL-3102 | I Corinthians |
| BIBL-3213 | Galatians, I and II Thessalonians |
| BIBL-3223 | The Pentateuch |
| BIBL-3512 | Prison Epistles |
| BIBL-3613 | Job to Song of Solomon |
| BIBL-3712 | Hebrews |

DRAMATURGY MINOR 18 HOURS
6 HOURS CHOSEN FROM
ENGL-4103 Modern Drama
ENGL-4213 Studies in Shakespeare
COMM-4813 Special Studies: Dramatic Literature
6 HOURS FROM COMMUNICATION DEPARTMENT AS APPROVED BY ADVISOR
6 HOURS ENGLISH CHOSEN FROM
ENGL-3013 Literary Criticism
ENGL-3123 World Literature I: Classical to Renaissance
ENGL-3133 World Literature II: Renaissance to Modern
ENGL-3153 English Literature Survey I
ENGL-3253 English Literature Survey II
ENGL-3523 Creative Writing I
INTERACTIVE MEDIA MINOR 19 HOURS
ARTS-1103 Technology for Graphics
ARTS-2243 Interactive Media Design I
COMM-1211 Introduction to Electronic Media
COMM-2643 Media Production
COMM-3143 Basics of Visual Communication Design
COMM-3633 Audio for Media
COMM-3703 Motion Graphics
LEADERSHIP MINOR, 18 HOURS
9 HOURS FOUNDATION

| COMM-3333 | Team Communication and Leadership |
| :--- | :--- |
| COMM-4523 | Conflict Resolution and Negotiation |
| LDSH-2003 | Effective Leadership |


| 3 HOURS ETHICS CHOSEN FROM |  |
| :--- | :--- |
| BIBL-3913 | Contemporary Ethics |
| BUSA-3713 | Business Ethics |

3 HOURS MANAGEMENT/ORGANIZATION CHOSEN FROM
COMM-3323 Organizational Communication
MGMT-3113 Principles of Management
3 HOURS ELECTIVES CHOSEN FROM
COMM-3003 Family Communication and Leadership
COMM-4113 Persuasion and Advocacy
LDSH-2011 Community Leadership Seminar
MGMT-4313 Organizational Behavior
MASS COMMUNICATION MINOR 18 HOURS
6 HOURS COMMUNICATION

| COMM-2113 | Writing for Media |
| :--- | :--- |
| COMM-2613 | Media, Faith, and Culture |

12 HOURS IN A FOCUSED AREA
Journalism, public relations, or electronic media to be worked out with the appropriate advisor.

| MEDIA PRODUCTION MINOR 18 HOURS 13 HOURS REQUIRED |  |
| :---: | :---: |
| COMM-1211 | Introduction to Electronic Media |
| COMM-3343 | Campaigns |
| COMM-3633 | Audio for Media |
| COMM-3733 | Media Marketing and Sales |
| COMM 4513 | Administrative Aspects of Electronic Media |
| 2 HOURS WORKSHOP OR INTERNSHIP |  |
| 2 additional hours of workshop or internship or an advanced production course |  |
| 3 HOURS CHOSEN FROM |  |
| ACCT-2113 | Accounting Principles I |
| ECON-2113 | Macroeconomics |
| ORGANIZATIONAL COMMUNICATION MINOR 18 HOURS 9 HOURS |  |
| COMM-3113 | Business and Professional Communication |
| COMM-3323 | Organizational Communication |
| COMM-3333 | Team Communication and Leadership |
| 9 HOURS CHOSEN FROM |  |
| COMM-2113 | Writing for Media |
| COMM-3723 | Interviewing |
| COMM-4113 | Persuasion and Advocacy |
| MGMT-3113 | Principles of Management |
| THEATER PERFORMANCE MINOR 18 HOURS 3 HOURS ACTING |  |
| COMM-2313 | Acting I |
| 3 HOURS |  |
| COMM-3213 | Stage Directing |
| 12 HOURS CHOSEN FROM |  |
| COMM-2023 | History of Theater |
| COMM-2213 | Voice and Articulation |
| COMM-4103 | Modern Drama |
| COMM-4813 | Special Studies Dramatic Literature |
| ENGL-4213 | Studies in Shakespeare |

## SCHOOL OF EDUCATION

## TEACHER EDUCATION

PROFESSIONAL EDUCATION MINOR 18 HOURS 10 HOURS REQUIRED
EDUC-3122 School in American Culture
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
3 HOURS PSYCHOLOGY
PSYC-3523 Developmental Psychology

5 HOURS ELECTIVES FROM EDUCATION, EARLY CHILDHOOD EDUCATION, AND ELEMENTARY EDUCATION

Students wishing to pursue an Education minor must be approved by the Chair of the School of Education. A plan of study, as determined by the major advisor and the Chair of the School of Education, must be filed. Students must meet prerequisites as defined by the catalog. This is also the suggested course of study for students pursuing an Interdisciplinary Studies degree.

## ALTERNATIVE CERTIFICATION 18 HOURS

The following requirements are for those persons who hold a bachelor's degree in the discipline in which the license is sought.

10 HOURS REQUIRED
EDUC-3122 School in American Culture
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child

3 HOURS APPROPRIATE METHODS COURSE
PSYC-3523 Developmental Psychology

## 5 HOURS

From the department that houses the licensure program. Exceptions may be granted through the approval of the Chair of the School of Education.

A student who has been denied admission to Teacher Education or who has lost admission status will not be approved for alternative certification.

## HISTORY AND POLITICAL SCIENCE

## HISTORY MINOR 18 HOURS

18 HOURS HISTORY
Including at least 9 hours numbered 3000 or above.
POLITICAL SCIENCE MINOR 18 HOURS
3 HOURS REQUIRED
POLS-2113 American Government
6 ADDITIONAL HOURS POLITICAL SCIENCE
9 HOURS OF $3000 / 4000$ LEVEL POLITICAL SCIENCE

## SOCIAL SCIENCE MINOR 18 HOURS

18 HOURS CHOSEN FROM
Any combination of economics, geography, history, political science, and
sociology under one of two plans:
TWO OF THE ABOVE AREAS WITH 9 HOURS EACH
or
THREE AREAS WITH 6 HOURS EACH
INCLUDING AT LEAST 9 HOURS NUMBERED 3000 OR ABOVE

## INTERDISCIPLINARY STUDIES

INTERNATIONAL STUDIES MINOR, 18 HOURS
6 HOURS STUDY ABOARD OR 6 HOURS FOREIGN LANGUAGE
6 HOURS MUST BE UPPER DIVISION
You must participate in an approved OC study abroad program. Contact Office
of International Programs for a list of approved programs

## or

Take 6 hours of foreign Language
and
12 HOURS CHOSEN FROM APPROVED COURSES
List of approved courses availabe in the International Programs Office.

## MILITARY SCIENCE MINOR 18 HOURS

 18 HOURS MILITARY SCIENCEIncluding at least 9 hours numbered 3000 or above
All Military Science classes will be taken at the University of Central Oklahoma or the University of Oklahoma.

## PERFORMING ARTS MANAGEMENT MINOR 18 HOURS

12 HOURS CORE
COMM-2833 Public Relations Principles
ENGL-3493 Technical Writing

## MINOR REQUIREMENTS - COLLEGE OF LIBERAL ARTS

| MGMT-3133 | Principles of Management |
| :--- | :--- |
| MKTG-3513 | Principles of Marketing |
|  |  |
| 6 HOURS ELECTIVES | CHOSEN FROM |
| COMM-3113 | Business and Professional Communication |
| COMM-3543 | Public Relations Case Studies |
| MGMT-3323 | Entrepreneurship and Small Business Management |
| MGMT-3533 | Issues in Management |
| MKTG-3413 | Consumer Behavior |
| MKTG-4313 | Promotional Strategies |

## LANGUAGE AND LITERATURE

## ENGLISH MINOR 18 HOURS

Including at least 12 hours numbered 3000 or above literature courses, excluding ENGL-1113 and ENGL-1213

INTRODUCTION TO WRITING ABOUT LITERATURE
ENGL-2223 Introduction to Writing about Literature
15 HOURS ENGLISH COURSES, 12 HOURS MUST BE UPPER DIVIISION LITERATURE COURSES

## SPANISH MINOR 18 HOURS

18 HOURS OF SPANISH
Including at least 9 hours numbered 3000 or above.
SPANISH PROFICIENCY:
Any candidate for teacher licensure may achieve a Spanish Proficiency by completing one of the following

A minimum of 12 hours in Spanish or the equivalent of courses through Intermediate Spanish II.

Eighteen hours in Spanish or the equivalent of two courses beyond Intermediate Spanish II.

Four courses beyond novice-level proficiency. Additional requirements include field experience for immersion in the Spanish language (to be approved by advisor).

Students may earn six of the required 12 hours in Spanish while spending a full month immersed in the target language and culture. The proficiency is noted on the transcript, but has no effect on licensure.

## TEFL MINOR 18 HOURS

15 HOURS
ENGL-3313 Introduction to Linguistics
ENGL-3713 Structures of the English Language
ENGL-4633 Intercultural Communication I
ENGL-4713 Methods of TEFL
ENGL-4863 TEFL Student Teaching Practicum
3 HOURS CHOSEN FROM
ENGL-1331 TEFL Experience I
ENGL-2332 TEFL Experience II
ENGL-3493 Technical Writing
HIST-3133 Latin American Peoples
HIST-3143 Civilizations of the Pacific Rim
SOCI-3513 World Religions
SOCI-3613 Cultural Anthropology

WRITING MINOR 18 HOURS
6 HOURS REQUIRED

| ENGL-3493 | Technical Writing |
| :--- | :--- |
| ENGL-3813 | Advanced Writing |

9 HOURS CHOSEN FROM
COMM-2113 Writing for Media
COMM-2723 Script Writing for Television and Movies
COMM-3823 Feature Writing
ENGL-3313 Introduction to Linguistics
ENGL-3523 Creative Writing I
ENGL-3533 Creative Writing II
ENGL-3713 Structure of the English Language
ENGL-4851 Practicum in Writing/Research and Editing
ENGL-4852 Practicum in Writing/Research and Editing
3 HOURS UPPER DIIISION LITERATURE

## MUSIC

MUSIC MINOR 18 HOURS
8 HOURS BASIC MUSIC THEORY
MUSC-1023 Fundamentals of Music Theory
MUSC-1112 Music Theory I
MUSC-1211 Ear Training II
MUSC-1212 Music Theory II
3 HOURS MUSIC APPRECIATION OR MUSIC HISTORY CHOSEN FROM
MUSC-2013 Music Appreciation
MUSC-3323 Music History I: Ancient through Renaissance
MUSC-3333 Music History II: Baroque through Classical
MUSC-3343 Music History III: Romantic and Contemporary
5-7 HOURS ENSEMBLE PERFORMANCE AND APPLIED STUDY TO BE CHOSEN FROM
$1300-1500$ level courses, at least 2 hours must be applied instruction
$0-2$ HOURS CLASS PIANO. THE FOLLOWING TWO COURSES MUST BE TAKEN UNLESS PIANO SKILLS FROM PRE-COLLEGE STUDY ARE DEEMED SUFFICIENT BY THE PIANO FACULTY.
MUSC-1581 Class Piano I
MUSC-1681 Class Piano II
must enroll in musc-1000 And earn a grade of "C" OR better at least three SEMESTERS

## PSYCHOLOGY AND FAMILY SCIENCE

FAMILY SCIENCE MINOR 18 HOURS
18 HOURS FAMLLY SCIENCE COURSES,
INCLUDING AT LEAST 9 HOURS UPPER DIVIIION
May also include:
PSYC-3523 Developmental Psychology
PSYCHOLOGY MINOR 18 HOURS
6 HOURS REQUIRED
$\begin{array}{ll}\text { PSYC-1113 } & \text { General Psychology I } \\ \text { PSYC-2223 } & \text { General Psychology II }\end{array}$
and
12 ADDITIONAL HOURS PSYCHOLOGY TO BE DETERMINED BY THE STUDENT'S GOALS WITH THE APPROVAL OF THE DEPARTMENT

HUMAN DEVELOPMENT MINOR 18 HOURS
18 HOURS CHOSEN FROM
CHDV-3013 Nature and Characteristics of the Preschool and
Primary Age Child

CHDV-3023
CHDV-4023
EDUC-3723
FMST-2423
FMST-3313 FMST-3513


## COLLEGE OF

## NATURAL \&

## HEALTH SCIENCES

Division of Natural Sciences
Division of Health Sciences
School of Nursing

## DIVISION OF

## NATURAL SCIENCES

## AREAS OF STUDY

Biology (BIOL)
Biochemistry (BIOL) (CHEM)
Biochemistry/Molecular Biology (BIOL) (CHEM)
Chemistry (CHEM)
General Science (GNSC)
Medical Laboratory Science (MLSP)
Science Education (BIOL) (CHEM) (GNSC) (PHYS)
Pre-professional programs: pre-medical, pre-dental, pre-veterinary, pre-physical therapy, pre-occupational therapy, pre-nursing, pre-pharmacy, pre-radiation technology, pre-physician associate, and pre-optometry

## DEGREES OFFERED

B.S. Degree in Biology
B.S. Degree in Cellular and Molecular Biology
B.S. Degree in Chemistry
B.S. Degree in Forensic Science
B.S. Degree in Nutrition and Exercise Science
B.S.E. Degree in Science Education, Biological Science
B.S.E. Degree in Science Education, Physical Science

## MINORS

Biology
Chemistry
Nutrion and Exercise Science
Physical Science
FACULTY
Sara Alcon, Ph.D., Assistant Professor of Biology
Christopher Austin, Ph.D., Associate Professor of Physics
Clay Bowman, B.S., Instructor of Physics
Paul House, Ph.D., Associate Professor of Exercise Science
Jonathan Hunt, Ph.D., Assistant Professor of Biology
Lindsey Long, Ph.D., Visiting Assistant Professor of Biology
William Luttrell, Ph.D., Professor of Chemistry
Al Mikell, Ph.D., Professor of Biology
Jeff McCormack, Ph.D., Dean of the College of Natural and Health Sciences, Lawson Professor of Microbiology and Immunology Sciences
Amanda Nichols, Ph.D., Associate Dean of the Division of Natural Sciences, Associate Professor of Chemistry
Howard Vogel, Ph.D., Professor of Chemistry

## ADMINISTRATION

Jeff McCormack, Ph.D., Dean of the College of Natural and Health Sciences,
Lawson Professor of Microbiology and Immunology
Amanda Nichols, Ph.D., Associate Dean of the Division of Natural Sciences,
Associate Professor of Chemistry

## DEAN'S OFFICE

Noble Science Wing, Herold Science Hall, Room 202-I
LOCATION
Herold Science Hall
Prince Engineering Center
Vose Hall

## PRE-PROFESSIONAL PROGRAMS

Pre-medical, pre-dentistry, and other programs: There are many professional programs in the health sciences available to students, requiring a variety of preparations for admittance. Students wanting to become physicians (M.D. or D.O.), dentists, optometrists, podiatrists, or pharmacists usually need to complete a B.S. degree before being accepted into the postgraduate programs.

Because requirements at different professional schools vary, you should decide at which schools you plan to seek admission and work closely with your faculty advisor to make certain that all entrance requirements are met. OC has an excellent record of acceptances into a number of professional schools. Physical therapy (P.T.) and occupational therapy (O.T.) programs are typically masters degree or doctorate programs. Although the requirements for admission are diverse, OC offers the prerequisites for these programs. You should check with the institution offering a P.T. or O.T. program to determine the specific prerequisites. Because of the competition for entry into P.T. and O.T. programs, many students will have to complete a bachelors degree in biology or psychology while fulfilling the specific prerequisites for entry into the P.T. or O.T. program. For students desiring to gain admission to the P.T. or O.T. programs at the University of Oklahoma Health Sciences Center, a B.S. degree must be completed.

## B.S. DEGREE IN BIOCHEMISTRY 79 HOURS

An OC graduate with a Bachelor of Science degree in Biochemistry will have:

1. Active Faith: Develop mature Christian attitudes towards scholarship, intellectual honesty, and ethical conduct that promote a life-long appreciation for learning in biochemistry.
2. Foundational Knowledge: Acquire a fundamental body of knowledge in the natural sciences, emphasizing chemistry, biochemistry, and physics.
3. Information Literacy: Effectively identify, locate, and evaluate information needed for preparing a scientific paper, presentation, or project, primarily using biochemistry resources.
4. Structured Reasoning: Understand the scientific method and use it to measure and evaluate experimental data in chemistry, biochemsitry, and physics labs.
5. Critical and Creative Thinking: Solve problems and think critically in both experimental and theoretical situations.
6. Effective Communication: Communicate effectively the results of scientific research and study, primarily in chemistry, biochemistry, and physics.
7. Personal, Social, and Global Stewardship: Participate in curricular and extracurricular activities that enhance learning and preparation for careers in the natural sciences, primarily in biochemistry.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 4 HOURS MATHEMATICS

MATH-2114 Calculus I with Analytical Geometry
8 HOURS PHYSICS WITH LABORATORY
PHYS-1114 College Physics I
or
PHYS-2514 Physics I
PHYS-1214 College Physics II
or
PHYS-2614 Physics II
21 HOURS BIOLOGY
BIOL-1115 General Biology I: Cellular and Molecular Systems
BIOL-2314 Genetics
BIOL-2913 Biostatistics Methods
BIOL-3415 General Microbiology
BIOL-4223 Molecular Biology
BIOL-4301 Molecular Biology Lab

## 34 HOURS CHEMISTRY

CHEM-1115 General Chemistry I
CHEM-1215 General Chemistry II
CHEM-3114 Analytical Chemistry I
CHEM-3115 Organic Chemistry I
CHEM-3124 Organic Chemistry II
CHEM-4014 Biochemistry I and Lab
CHEM-4113 Physical Chemistry I
CHEM-4121 Physical Chemistry Experiments I
CHEM-4123 Biochemistry II

## 5 HOURS SCIENCE SEMINAR

GNSC-1711 Freshman Science Seminar
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar

7 HOURS TECHNICAL ELECTIVES CHOSEN FROM
BIOL-1215
BIOL-2244
General Biology II: Diversity, Physiology and Ecology
Human Anatomy
BIOL-3224 Human Physiology
BIOL-3435 Pathogenic Microbiology
BIOL-4213 Immunology
BIOL-4411 Introduction to Research
BIOL-4412 Undergraduate Research
CHEM-2113 Introduction to Forensic Science
CHEM-3214 Analytical Chemistry II
CHEM-4213 Physical Chemistry II
CHEM-4221 Physical Chemistry Experiments II
CHEM-4313 Forensic Toxicology
CHEM-4414 Inorganic Chemistry
CHEM-4514 Forensic Analysis
CHEM-4611 Research Methods
CHEM-4612 Research Methods
CHEM-4613 Research Methods
CHEM-4713 Practicum in Forensic Science
MATH-2214 Calculus II with Analytical Geometry
Recommendations As Follows:
a. Medical School Track - Take Immunology, Human Anatomy w/ Cadaver Dissection, and Human Physiology.
b. Graduate School/Industry Track - Take Calculus II, Physical Chemistry II plus Lab, Analytical Chemisty II, and Technical Writing.
c. Forensics Track - Take Introduction to Forensic Science, Forensic Toxicology, Forensic Analysis, and Practicum in Forensic Science No more than 3 hours of Practicum in Forensic Science courses may be counted toward the biochemistry major.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
Story of the New
Testament
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 MUSC-2013 MUSC-3213 | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
|  | Music Appreciation | GEOG-2113 | Elements of Human |
|  | Perspectives in World |  | Geography |
|  | Music | GEOG-2213 | World Regional |
|  |  |  | Geography |
| SCIENCE, 6 HOURS |  | HIST-2613 | The Modern Middle East |
| used in major |  | MISS-3513 | World Religio |
|  |  | MISS-3613 | Cultural Anthropology |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  | MISS-3673 | New Religious |
| BEHAVIORAL SCIENCE, 3 HOURS |  | MUSC-3213 | Movements |
|  |  | Perspectives in World |
| PSYC-1113 | $\begin{aligned} & \text { SCIENCE, } 3 \text { HOURS } \\ & \text { General Psychology I } \end{aligned}$ |  | Music |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  |  | LIBERAL ARTS, 3 HOURS outside major, as approved by department |  |
|  |  |  |  |  |
| WESTERN CIVILIZATION, 3 HOURSHIST-2923$\begin{gathered}\text { Perspectives in Western } \\ \text { Civilization }\end{gathered}$ |  | *For more information on how to apply the study abroad trips to the core curriculum see page 25. |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## B.S. DEGREE IN BIOLOGY <br> 70-71 HOURS

An OC graduate with a Bachelor of Science degree in Biology will:

1. Mature in active faith by developing a consistent and rational view of science and Christianity and demonstrating a lifestyle of service, discipleship, and integrity.
2. Demonstrate a fundamental body of knowledge in biological and physical sciences by meeting or exceeding the national average in standardized tests of biology and chemistry.
3. Effectively acquire, critically analyze, and apply knowledge from primary scientific literature.
4. Conduct research using appropriate formatting, techniques, and development of research plans.
5. Design and execute experiments, interpret data, and formulate conclusions.
6. Effectively communicate personal research as well as scientific and medical advances to the scientific community or the general public.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 18 HOURS BIOLOGY FOUNDATION

| BIOL-1115 | General Biology I: Cellular and Molecular Systems |
| :--- | :--- |
| BIOL-1215 | General Biology II: Comparitive Physiology and Ecology |
| BIOL-2244 | Human Anatomy |
| BIOL-2314 | Genetics |

## BIOL-2314 <br> Genetics

22 HOURS 3000/4000 LEVEL BIOLOGY COURSES
Must include 6 lecture and 4 lab courses
Up to 4 hours can be satisfied by Undergraduate Research

## 15 HOURS CHEMISTRY

| CHEM-1115 | General Chemistry I |
| :--- | :--- |
| CHEM-1215 | General Chemistry II |
| CHEM-3115 | Organic Chemistry I |

## 3-4 HOURS MATHEMATICS CHOSEN FROM <br> MATH-1213 College Algebra <br> MATH-2114 Calculus I with Analytical Geometry

3 HOURS STATISTICS
BIOL-2913 Biostatistics

## 4 HOURS PHYSICS WITH LABORATORY CHOSEN FROM

PHYS-1114 College Physics I
PHYS-2514 Physics I

## 5 HOURS SCIENCE SEMINAR

GNSC-1711 Freshman Science Seminar
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar

## RECOMMENDED, BUT NOT REQUIRED

MATH-1523 Trigonometry

## NOTE: PROGRAM REQUIREMENTS:

Before taking any 3000/4000 level biology classes, you must:

1. Complete 18 hours of biology foundation.
2. Maintain a major GPA of 2.5 .
3. Complete all prerequisite courses with a grade of " C " or better.
4. Complete GNSC-1711 and GNSC-2711; while enrolled, students must seek approval to add upper division biology courses.
5. Complete ENGL-1213 with a grade of "C" or better.
6. Obtain departmental approval.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church:Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 $\begin{gathered}\text { Turning Points in U.S. } \\ \begin{array}{l}\text { History }\end{array}\end{gathered}$ |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURSshould include literature |  |
|  |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |


| MUSC-3213 | $\begin{array}{l}\text { Perspectives in World } \\ \text { Music }\end{array}$ | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :--- | :--- | :--- | :--- |
| GEOG-2113 | Elements of Human |  |  |
| Geography |  |  |  |$]$

## B.S. DEGREE IN CELLULAR AND MOLECULAR BIOLOGY 78-79 HOURS

This major consists of four years of study in biology, biochemistry, chemistry, and physics that is designed to prepare students for future professional and graduate level programs. This major would be appropriate for students interested in a pre-med course of study.

An OC graduate with a Bachelor of Science degree in Cellular and Molecular Biology will:

1. Mature in active faith by developing a consistent and rational view of science and Christianity and demonstrating a lifestyle of service, discipleship, and integrity.
2. Demonstrate a fundamental body of knowledge in biological and physical sciences by meeting or exceeding the national average in standardized tests of biology and chemistry.
3. Effectively acquire, critically analyze, and apply knowledge from primary scientific literature.
4. Conduct research using appropriate formatting, techniques, and development of research plans.
5. Design and execute experiments, interpret data, and formulate conclusions.
6. Effectively communicate personal research as well as scientific and medical advances to the scientific community or the general public.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 14 HOURS BIOLOGY FOUNDATION

| BIOL-1115 | General Biology I: Cellular and Molecular Systems |
| :--- | :--- |
| BIOL-1215 | General Biology II: Diversity, Physiology and Ecology |
| BIOL-2314 | Genetics |

BIOL-2314 Genetics
14 HOURS REQUIRED UPPER DIVISION BIOLOGY
BIOL-4014 Biochemistry I
BIOL-4123 Biochemistry II
BIOL-4223 Molecular Biology
BIOL-4301 Molecular Biology Lab
BIOL-4323 Advanced Cellular Biology
12 HOURS ELECTIVE UPPER DIVSION BIOLOGY
3000/4000 Biology
Maximum 4 hours of Undergraduate Research or Field Medicine Practicum
19 HOURS CHEMISTRY

| CHEM-1115 | General Chemistry I |
| :--- | :--- |
| CHEM-1215 | General Chemistry II |
| CHEM-3115 | Organic Chemistry I |
| CHEM-3124 | Organic Chemistry II |

8 HOURS PHYSICS WITH LABORATORY
PHYS-1114 College Physics I or
PHYS-2514 Physics I
PHYS-1214 College Physics II or
PHYS $2614 \quad$ Physics II

## 3-4 HOURS MATHEMATICS CHOSEN FROM

MATH-1213 College Algebra
MATH-2114 Calculus I with Analytical Geometry
3 HOURS STATISTICS
BIOL-2913 Biostatistics
5 HOURS SCIENCE SEMINAR
GNSC-1711 Freshman Science Seminar
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar
Note: Transfer students must complete at least 30 hours (two semesters) at OC to be eligible to enroll in the clinical training courses.

NOTE: PROGRAM REQUIREMENTS:
Before taking any 3000/4000 level biology classes, you must:

1. Complete 14 hours of biology foundation.
2. Maintain a major GPA of 2.5 .
3. Complete all prerequisite courses with a grade of " C " or better.
4. Complete GNSC-1711 and GNSC-2711; while enrolled, students must seek approval to add upper division biology courses.
5. Complete ENGL-1213 with a grade of "C" or better.
6. Obtain departmental approval.

## UNIVERSITY CORE CURRICULUM:

## B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major |  |
| MATH-1213 | College Algebra |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212BIBL-1312 | Life of Christ: Matthew |
|  | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old |
|  | Testament |
| BIBL-2302 | Story of the New |
|  | Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

COMMUNICATION, 9 HOURS
English Composition
ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTON <br> BIBL-4523 | Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL <br> POLS-2113 | SCIENCE, 3 HOURS <br> Introduction to American Government |
| AMERICAN HIST-1223 | HISTORY, 3 HOURS Turning Points in U.S. History |
| GREAT WORKS, 3 HOURS should include literature |  |
| ARTS-2013 | Survey of Visual Cul |
| ARTS-2423 | History of Photography \& Motion Pictures |
| COMM-2023 | History of Theater |


| $\begin{array}{ll}\text { ENGL-2213 } & \text { Perspectiv } \\ \text { MUSC-2013 } & \text { Music App } \\ \text { MUSC-3213 } & \text { Perspectiv } \\ & \text { Music }\end{array}$ | NON-WESTERN CIVILIZATION, 3 HOU |
| :---: | :---: |
|  | GEOG-2113 Elements of Human |
|  | Geography |
|  | GEOG-2213 World Regional |
|  | Geography |
| SCIENCE, 6 HOURS | HIST-2613 The Modern Middle East |
| used in major | MISS-3513 World Re |
|  | MISS-3613 Cultural Anthropology |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: | MISS-3673 New Religious |
|  | Movements |
| BEHAVIORAL SCIENCE, 3 HOURS | MUSC-3213 Perspectives in World |
| PSYC-1113 General Psychology I | Music |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left | LIBERAL ARTS, 3 HOURS <br> outside major, as approved by department |
|  |  |
| WESTERN CIVILIZATION, 3 HOURSHIST-2923$\begin{gathered}\text { Perspectives in Western } \\ \text { Civilization }\end{gathered}$ | *For more information on how to apply the study abroad trips to the core curriculum se page 25. |
|  |  |
|  |  |

## B.S. DECREE IN CHEMISTRY <br> 78 HOURS

An OC graduate with a Bachelor of Science degree in Chemistry will have:

1. Active Faith: Develop mature Christian attitudes towards scholarship, intellectual honesty, and ethical conduct that promote a life-long appreciation for learning in chemistry.
2. Foundational Knowledge: Acquire a fundamental body of knowledge in the natural sciences, emphasizing chemistry, biochemistry, and physics.
3. Information Literacy: Effectively identify, locate, and evaluate information needed for preparing a scientific paper, presentation, or project, primarily using chemistry resources.
4. Structured Reasoning: Understand the scientific method and use it to measure and evaluate experimental data in chemistry, biochemistry, and physics labs.
5. Critical and Creative Thinking: Solve problems and think critically in both experimental and theoretical situations.
6. Effective Communication: Communicate effectively the results of scientific research and study.
7. Personal, Social, and Global Stewardship: Participate in curricular and extracurricularactivities that enhance learning and preparation for careers in the natural sciences.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 12 HOURS CALCULUS

MATH-2114 Calculus I with Analytical Geometry
MATH-2214 Calculus II with Analytical Geometry
MATH-2314 Calculus III
11 HOURS PHYSICS AND LABORATORY
PHYS-2514 Physics I
PHYS-2614 Physics II
PHYS-3313 Modern Physics

## 43 HOURS CHEMISTRY

CHEM-1115 General Chemistry I
CHEM-1215 General Chemistry II
CHEM-3114 Analytical Chemistry I
CHEM-3115 Organic Chemistry I
CHEM-3124 Organic Chemistry II
CHEM-3214 Analytical Chemistry II
CHEM-4014 Biochemistry I and Lab
CHEM-4113 Physical Chemistry I
CHEM-4121 Physical Chemistry Experiments I
CHEM-4213 Physical Chemistry II
CHEM-4221 Physical Chemistry Experiments II
CHEM-4414 Inorganic Chemistry

7 HOURS TECHNICAL ELECTIVES CHOSEN FROM
CHEM-4123 Biochemistry II
CHEM-4313 Forensic Toxicology
CHEM-4514 Forensic Analysis
CHEM-4611 Research Methods
CHEM-4612 Research Methods
CHEM-4613 Research Methods
CHEM-4713 Practicum in Forensic Science
MATH-3013 Differential Equations
No more than 3 hours of Practicum in Forensic Science courses may be
counted toward the chemistry major.
5 HOURS SCIENCE SEMINAR
GNSC-1711 Freshman Science Seminar
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar
Students planning to pursue graduate work in chemistry should include MATH-3013-Differential Equations and one computer science course (CMSC-1113Programming I, CMSC-1123-Programming II, or CMSC-2133-Object Oriented Programming).

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication

## MATHEMATICS, 3 HOURS

used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, 3 HOURS |  |
| :---: | :---: |
| BIBL-4523 | Capstone: Christ and His World |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS |  |
| HIST-1223 | Turning Points in U.S. |
|  | History |
| GREAT WORKS, 3 HOURS |  |
| should include literature |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |


| ENGL-2213 | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
| MUSC-2013 | Music Appreciation | GEOG-2113 | Elements of Human |
| MUSC-3213 | Perspectives in World | GEOG-2213 | Geography |
|  | Music |  | World Regional |
|  |  |  | Geography |
|  |  |  | The Modern Middle East |
| HOURS used in major |  | $\begin{aligned} & \text { MISS-3513 } \\ & \text { MISS-3613 } \end{aligned}$ | World Religions |
|  |  | Cultural Anthropology |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  |  | MISS-3673 | New Religious |
| BEHAVIORAL SCIENCE, 3 HOURS |  |  |  |
|  |  | MUSC-3213 | Perspectives in World |
| PSYC-1113 | General Psychology I |  |  |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  | LIBERAL ARTS, 3 HOURS outside major, as approved by department |  |
|  |  |  |  |  |
| WESTERN CIVILIZATION, 3 HOURS HIST-2923 Perspectives in Western Civilization |  | *For more information on how to apply the study abroad trips to the core curriculum see peat 25 |  |
|  |  |  |  |  |
|  |  |  |  |  |

## B.S. DEGREE IN FORENSIC SCIENCE 78 HOURS

An OC graduate with a Bachelor of Science degree in Forensic Science will have:

1. Active Faith: Develop mature Christian attitudes towards scholarship, intellectual honesty, and ethical conduct that promote a life-long appreciation for learning in forensic science.
2. Foundational Knowledge: Acquire a fundamental body of knowledge in the natural sciences with an emphsais in forensic science.
3. Information Literacy: Effectively identify, locate, and evaluate information needed for preparing a scientific paper, presentation, or project.
4. Structured Reasoning: Understand the scientific method and use it to measure and evaluate experimental data in all labs, including the forensic science lab.
5. Critical and Creative Thinking: Solve problems and think critically in both experimental and theoretical situations.
6. Effective Communication: Communicate effectively the results of scientific research and study, primarily in forensic science.
7. Personal, Social, and Global Stewardship: Participate in curricular and extracurricular activities that enhance learning and preparation for careers in the forensic science field.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 3 HOURS MATHEMATICS |  |
| :---: | :---: |
| MATH-1213 | College Algebra |
| 8 HOURS PHYSICS WITH LABORATORY |  |
| PHYS-1114 | College Physics I |
| PHYS-1214 | College Physics II |
| 8 HOURS BIOLOGY |  |
| BIOL-1115 | General Biology I: Cellular and Molecular Systems |
| BIOL-2913 | Biostatistics Methods |
| 31 HOURS CHEMISTRY |  |
| CHEM-1115 | General Chemistry I |
| CHEM-1215 | General Chemistry II |
| CHEM-3114 | Analytical Chemistry I |
| CHEM-3115 | Organic Chemistry I |
| CHEM-3124 | Organic Chemistry II |
| CHEM-3214 | Analytical Chemistry II |
| CHEM-4014 | Biochemistry I and Lab |
| 16 HOURS FORENSIC SCIENCE |  |
| CHEM-2113 | Introduction to Forensic Science |
| CHEM-4313 | Forensic Toxicology |
| CHEM-4514 | Forensic Analysis |
| CHEM-4713 | Practicum in Forensic Science |
| GNSC-3113 | Forensic Science and the Law |

## 5 HOURS OF SCIENCE SEMINAR

GNSC-1711 Freshman Science Seminar

## GNSC-2711 Sophomore Science Seminar

## GNSC-3711 <br> GNSC-4712

7 HOURS TECHNICAL ELECTIVES CHOSEN FROM
BIOL-2022 Medical Terminology
BIOL-2314 Genetics
BIOL-2523 Anatomy \& Physiology I
BIOL-2623 Anatomy \& Physiology II
BIOL-3224 Human Physiology
BIOL-3435 Pathogenic Microbiology
BIOL-4223 Molecular Biology
BIOL-4301 Molecular Biology Lab
CHEM-4613 Research Methods
MATH-2114 Calculus I with Analytical Geometry
PSYC-3313 Abnormal Psychology
PSYC-3913 Psychology of Crime
PSYC-4413 Biological Psychology
PSYC-4423 Drugs and Psychopharmacology

UNIVERSITY CORE CURRICULUM:
B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major |  |
| MATH-1213 | College Algebra |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 Life of Christ: Matthe |  |
| BIBL-1312 Life of the Early Church: |  |
| BIBL-2202 | Story of the Old |
| BIBL-2302 | Testament Story of the New |
|  | Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |


| CAPSTONE, 3 HOURS |  |
| :--- | :--- |
| BIBL-4523 | Capstone: Christ and His <br> World |
| POLITICAL |  |


| $\begin{aligned} & \text { ENGL-2213 } \\ & \text { MUSC-2013 } \\ & \text { MUSC-3213 } \end{aligned}$ | Perspectives in Literature | NON-WESTERN CIVILIZATION, 3 HOURS |  |
| :---: | :---: | :---: | :---: |
|  | Music Appreciation | GEOG-2113 | Elements of Human |
|  | Perspectives in World |  | Geography |
|  | Music | GEOG-2213 | World Regional |
|  |  |  | Geography |
| SCIENCE, 6 HOURS |  | HIST-2613 | The Modern Middle East |
| used in major |  | MISS-3513 | World Religions |
|  |  | MISS-3613 | Cultural Anthropology |
| CHOOSE 4 OF THE FOLLOWING 5 AREAS: |  | MISS-3673 | New Religious Movements |
| BEHAVIORAL SCIENCE, 3 HOURS |  | MUSC-3213 | Perspectives in World |
|  |  | Music |
| GREAT WORKS, ADDITIONAL, 3 HOURS Choose 3 hours from list on the left |  |  | LIBERAL ARTS, 3 HOURS outside major, as approved by department |  |
|  |  |  |  |  |
| WESTERN CIVILIZATION, 3 HOURS |  | *For more information on how to apply the study abroad trips to the core curriculum see page 25. |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

## B.S. DEGREE IN NUTRITION AND EXERCISE SCIENCE <br> 82-83 HOURS

The major consists of three years of university work, plus two semesters of Nutrition and Exercise Science Program courses.
An OC graduate with a Bachelor of Science degree in Nutrition and Exercise Science will:

1. Demonstrate active Christian faith through service, fellowship, and engagement.
2. Exhibit a breadth of knowledge with regard to nutrition and exercise science by displaying competency via both oral and standardized check-point exams.
3. Be able to identify and utilize evidenced-based, reputable, and reliable sources of health information.
4. Be able to determine which tests and markers are best used to assess an individual's health status, as well as the physiological rationale for these tests and markers.
5. Be able to recognize health issues or other problems in the world around them and formulate an evidence-based strategy to address and improve/resolve the issues.
6. Possess the ability to deliver nutrition and exercise information to health professionals, as well as the general public, via both personal conversation and professional presentation.
7. Be equipped to help others, both domestically and internationally, and prevent and manage health problems that are related to nutrition and exercise. Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 19 HOURS CHEMISTRY |  | NESP-2123 | Public Health Nutrition Missions |
| :---: | :---: | :---: | :---: |
| CHEM-1115 | General Chemistry I | NESP-3123 | Health Issues |
| CHEM-1215 | General Chemistry II | NESP-3233 | Exercise and Physiology |
| CHEM-3115 | Organic Chemistry I | NESP-3231 | Exercise Physiology Lab |
| CHEM-4014 | Biochemistry I with Lab | NESP-4123 | Nutrition Metabolism |
|  |  | NESP-4133 | Nutrition and Exercise |
| 23 HOURS BI |  | NESP-4443 | Capstone in Nutrition and Exercise Science |
| BIOL-1115 | General Biology I: Cellular and Molecular Systems |  |  |
| BIOL-2033 | Nutrition | CHOOSE AN EMPHASIS 6 OR 7 HOURS |  |
| BIBL-2244 | Human Anatomy | NUTRITION EMPHASIS |  |
| BIOL-2624 | Principles of Microbiology | NESP-3004 | Science of Food* |
| BIOL-2913 | Biostatistics | NESP-3013 | Lifespan Nutrition* |
| BIOL-3224 | Human Physiology |  |  |
|  |  | OR |  |
| 3 HOURS MATHEMATICS |  |  |  |
| MATH-1213 | College Algebra | EXERCISE EMPHASIS |  |
|  |  | NESP-3023 | Biomechanics |
| 3 HOURS BEHAVORIAL SCIENCE CHOSEN FROM |  | NESP-3033 | Exercise Testing and Prescription |
| PSYC-1113 | General Psychology I |  |  |
| SOCI-1113 | Sociology | NOTE: PROGRAM REQUIREMENTS: <br> Before taking any 3000/4000 level NESP courses, you must: |  |
|  |  |  |  |
| 2 HOUR SCIENCE SEMINAR |  | 1. Complete 18 hours of biology foundation. |  |
| GNSC-1711 | Freshman Science Seminar | 2. Maintain a major GPA of 2.5 . |  |
| GNSC-2711 | Sophomore Science Seminar | 3. Complete | quisite courses with a grade of " C " or better. |
|  | ITH LABORATORY | 4. Complete approval | 11 and GNSC-2711; while enrolled, students must seek per division biology courses. |
| PHYS-1114 | College Physics I | 5. Complete ENGL-1213 with a grade of " C " or better. |  |
|  |  | 6. Obtain dep | al approval. |

## COMPLETE 22 HOURS NES PROGRAM

NESP-1013 Introduction to Exercise Science

## CHOOSE AN EMPHASIS 6 OR 7 HOURS NUTRITION EMPHASIS

## OR

## EXERCISE EMPHASIS

## NOTE: PROGRAM REQUIREMENTS:

Before taking any 3000/4000 level NESP courses, you must:
in
3. Complete all prerequisite courses with a grade of " C " or better.

Complete GNSC-1711 and GNSC-2711; while enrolled, students must seek

Complete ENGL-1213 with a grade of "C" or better.
6. Obtain departmental approval.

## UNIVERSITY CORE CURRICULUM:

B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
BIBL-2302 Stary of the Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
| AMERICAN HISTORY, 3 HOURS <br> HIST-1223 Turning Points in U.S. History |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURS should include literature |  |
|  |  |
| ARTS-2013 | Survey of Visual Culture |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |

## B.S.E. DEGREE IN SCIENCE EDUCATION, BIOLOGY <br> 92 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

An OC graduate with a Bachelor of Science in Education degree in Science Education, Biology will:

1. Have acquired competency in a broad general education through study in the liberal arts by successfully completing the university core curriculum and passing he Oklahoma General Education Test (OGET).
2. Demonstrate an in-depth knowledge of their chosen area of science by achieving a 3.00 GPA in the major field and passing the Oklahoma Subject Area Test (OSAT) appropriate to the major field.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 26 HOURS FOUNDATION SCIENCE COURSES

CHEM-1115 General Chemistry I
CHEM-1215 General Chemistry II
GNSC-2313 Earth Science
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar
GNSC-4721 Science Modeling and Strategies
PHYS-1114 College Physics I
PHYS-1214 College Physics II
27 HOURS BIOLOGY
BIOL-1115 General Biology I: Cellular and Molecular Systems
BIOL-1215 General Biology II: Comparitive Physiology and Ecology
BIOl-2244 Human Anatomy
BIOL-2314 Genetics
BIOL-3224 Human Physiology
BIOL-3415 General Microbiology

## 6 HOURS MATHEMATICS

$\begin{array}{ll}\text { MATH-1213 } & \text { College Algebra } \\ \text { MATH-2913 } & \text { Statistical Methods }\end{array}$

LICENSURE: SCIENCE - GRADES 6-12

| 25 SEMESTER HOURS PROFESSIONAL EDUCATION |  |
| :--- | :--- |
| EDUC-3121 | Orientation to Teacher Education |
| EDUC-3122 | The School in American Culture |
| EDUC-3131 | Classroom Management Strategies |
| EDUC-3213 | Learning, Instruction, and Assessment |
| EDUC-3422 | Educational Technology |
| EDUC-3723 | Education of the Exceptional Child |
| EDUC-4012 | Human Relations and Behavior Management |
| EDUC-4131 | Applied Instructional and Assessment Strategies |
| EDUC-4132 | Critical Issues in Education |
| EDUC-4718 | Student Teaching in the Secondary Schools |
|  |  |
| 5 HOURS OTHER COURSES |  |
| EDUC-4112 | Literacy in the Secondary Content Areas |
| PSYC-3523 | Developmental Psychology |
| 3 HOURS METHODS COURSE |  |
| EDUC-4533 | Methods of Teaching Science in Secondary Schools |

## FOREIGN LANGUAGE COMPETENCY

Choose one:
High School Foreign Language - 2 years of same language with a grade of " C " or better
University credit - 3 hours foreign language or American Sign Language with a grade of "C" or better

## UNIVERSITY CORE CURRICULUM: <br> B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
|  |  |
| MATHEMATICS, 3 HOURS |  |
| used in major  <br> MATH-1213 College Algebra <br>   <br> REQUIRED BIBLE, 8 HOURS  <br> BIBL-1212 Life of Christ: Matthew <br> BIBL-1312 Life of the Early Church: Acts <br> BIBL-2202 Story of the Old Testament |  |

COMMUNICATION, HOURS

ENGL-1213 En
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in majo

REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament

BIBL-2302 Story of the New Testamen
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience
CAPSTONE, 3 HOURS
BIBL-4523 Capstone: Christ and His World

POLITICAL SCIENCE, 3 HOURS
POLS-2113 Introduction to American Governmen

AMERICAN HISTORY, 3 HOURS HIST-1223 Turning Points in U.S. History

GREAT WORKS, 3 HOURS
ENGL-2213 Perspectives in Literature
used in majo
BEHAVIORAL SCIENCE, 6 HOURS
PSYC-1113 General Psychology I
Dev Psyc used in major
PSYC-3523 Developmental Psychology

LIBERAL ARTS, 6 HOURS 6 hours from any Liberal Arts area, other than current major
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## B.S.E. DEGREE IN SCIENCE EDUCATION, PHYSICAL SCIENCE <br> 90 HOURS, PROFESSIONAL EDUCATION MINOR INCLUDED

An OC graduate with a Bachelor of Science Education degree in Science Education, Physical Science will have:

1. Active Faith: Develop mature Christian attitudes towards scholarship, intellectual honesty, and ethical conduct that promote a life-long appreciation for learning.
2. Foundational Knowledge: Acquire a fundamental body of knowledge in the liberal arts and natural sciences, emphasizing science education in physical science, being successful in the completion of the university core curriculum, and passing the Oklahoma General Education Test (OGET), as well as achieving a 3.00 GPA in the major field and passing the Oklahoma Subject Area Test (OSAT) appropriate to the major field.
3. Information Literacy: Effectively identify, locate, and evaluate information needed for preparing a scientific paper, presentation, or project.
4. Structured Reasoning: Understand the scientific method and use it to measure and evaluate experimental data.
5. Critical and Creative Thinking: Solve problems and think critically in both experimental and theoretical situations.
6. Effective Communication: Communicate effectively the results of scientific research and study.
7. Personal, Social, and Global Stewardship: Participate in curricular and extracurricular activities that enhance learning and preparation for careers in science education.
8. The requirements for a minor in professional education must also be met.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 44 HOURS FOUNDATION SCIENCE COURSES

BIOL-1115
General Biology I: Cellular and Molecular Systems
BIOL-1215 General Biology II: Comparitive Physiology and Ecology
CHEM-1115
CHEM-1215
CHEM-3115
GNSC-2313
GNSC-2323
GNSC-2711 Sophomore Science Seminar
GNSC-3711 Junior Science Seminar
GNSC-4712 Senior Science Seminar
GNSC-4721 Science Modeling and Strategies
PHYS-1114 College Physics I
PHYS-1214 College Physics II

## 10 HOURS MATHEMATICS

| MATH-1213 | College Algebra |
| :--- | :--- |
| MATH-2114 | Calculus I with Analytical Geometry |
| MATH-2913 | Statistical Methods |

3 HOURS UPPER DIVISION CHEMISTRY OR PHYSICS
LICENSURE: SCIENCE - GRADES 6-12

## 25 HOURS PROFESSIONAL EDUCATION

EDUC-3121 Orientation to Teacher Education
EDUC-3122 The School in American Culture
EDUC-3131 Classroom Management Strategies
EDUC-3213 Learning, Instruction, and Assessment
EDUC-3422 Educational Technology
EDUC-3723 Education of the Exceptional Child
EDUC-4012 Human Relations and Behavior Management
EDUC-4131 Applied Instructional and Assessment Strategies
EDUC-4132 Critical Issues in Education
EDUC-4718 Student Teaching in the Secondary Schools

## 5 HOURS OTHER COURSES

EDUC-4112 Literacy in the Secondary Content Areas
PSYC-3523 Developmental Psychology

## 3 HOURS METHODS COURSE

EDUC-4533 Methods of Teaching Science in Secondary Schools

## FOREIGN LANGUAGE COMPETENCY

Choose one:
High School Foreign Language - 2 years of same language with a grade of " C " or better
University credit - 3 hours foreign language or American Sign Language with a grade of "C" or better

## UNIVERSITY CORE CURRICULUM:

B.S.E. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

## COMMUNICATION, 9 HOURS

ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
appropriate to major

## REQUIRED BIBLE, 8 HOURS

BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old Testament
BIBL-2302 Story of the New Testament


GREAT WORKS, 3 HOURS ENGL-2213 Perspectives in Literature

## SCIENCE, 6 HOURS

used in major
BEHAVIORAL SCIENCE, 6 HOURS
PSYC-1113 General Psychology
Dev Psyc used in major
PSYC-3523 Developmental Psychology
LIBERAL ARTS, 6 HOURS
6 hours from any Liberal Arts area, other than current major

## DIVISION OF

## HEALTH SCIENCES

## AREAS OF STUDY

Medical Laboratory Science (MLSP)
Nursing (NURS)

## DEGREES OFFERED

B.S. Degree in Medical Laboratory Science
B.S.N. Degree in Nursing

## FACULTY

Jennifer Gray, Ph.D., Associate Dean of the Division of Health Sciences, Chair of the
School of Nursing, Professor of Nursing
Christy Hallock, M.S.N., Assistant Professor of Nursing
Dawn Hemphill, M.S.N., Assistant Professor of Nursing
Shawna Hood, M.S.N., Assistant Professor of Nursing
Rhea Ann Lee, M.S.N., Instructor of Nursing
Courtney McCoy, M.S.N., Assistant Professor of Nursing
Becky O'Neal, M.S.N., Assistant Professor of Nursing
Savannah Phillips, M.S.N., Instructor of Nursing
Trevy Rauch, M.S.N., Instructor of Nursing
Beth Scott, M.S.N., Assistant Professor of Nursing

## LOCATION

Nursing Administration Building
2nd Floor, Heritage Plaza

## DEAN

Jeff McCormack, Ph.D., Dean of the College of Natural and Health Sciences, Lawson Professor of Microbiology and Immunology
Jennifer Gray, Ph.D., Associate Dean of the Division of Health Sciences, Chair of the
School of Nursing, Professor of Nursing

## ADMINISTRATION

Evelyn Paxton, M.S., MT(ASCP), Medical Lab Science Program Director

## DEAN'S OFFICE

Noble Science Wing, Herold Science Hall, Room 202-I

## ALLIED HEALTH SCIENCE AREAS

There are also many other allied health science fields, such as physician associate, medical laboratory, radiation technology, dental hygiene, cytotechnology, environmental health, and industrial hygiene. These programs require from two to four years of undergraduate education before acceptance into the professional program. OC offers the necessary pre-professional education for these programs. Faculty advisors will work with you to plan an acceptable program.

## B.S. DEGREE IN MEDICAL LABORATORY SCIENCE <br> 86 HOURS

The major consists of three years of university work, plus two semesters of Medical Laboratory Science Program courses.
An OC graduate with a Bachelor of Science degree in Medical Laboratory Science will:

1. Safely collect, process, perform, and report routine clinical laboratory tests on biological specimens and other substances with precision and accuracy under minimal supervision within a reasonable length of time.
2. Perform routine maintenance, standardization, calibration procedures for laboratory equipment, and use necessary corrective methods to maintain and improve laboratory quality controls.
3. Use problem solving skills to recognize abnormal patient values and apply appropriate corrective procedures.
4. Correlate didactic instruction with laboratory results in the diagnosis and treatment of patients to understand the concept of total patient care.
5. Communicate well with all levels of personnel while demonstrating professional and ethical conduct and adhere to patient safety guidelines.
6. Stay current with new laboratory technologies and procedures through continuing professional education.

Student must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 19 HOURS CHEMISTRY |  |
| :--- | :--- |
| CHEM-1115 | General Chemistry I |
| CHEM-1215 | General Chemistry II |
| CHEM-3115 | Organic Chemistry I |
| CHEM-4014 | Biochemistry I with Lab |
| 26 HOURS BIOLOGY |  |
| BIOL-1115 | General Biology I: Cellular and Molecular Systems |
| BIOL-2314 | Genetics |
| BIOL-2623 | Anatomy \& Physiology II |
| BIOL-3415 | General Microbiology |
| BIOL-3432 | Pathogenic Microbiology Lab |
| BIOL-3433 | Pathogenic Microbiology |
| BIOL-4201 | Immunology Lab |
| BIOL-4213 | Immunology |

## 3 HOURS MATHEMATICS

MATH-1213 College Algebra
3 HOURS STATISTICS
BIOL-2913 Biostatistics
3 HOURS BEHAVORIAL SCIENCE CHOSEN FROM
PSYC-1113 General Psychology I
SOCI-1113 Sociology
1 HOUR SCIENCE SEMINAR
GNSC-3711
Junior Science Seminar

COMPLETE 31 HOURS MLS PROGRAM

| MLSP-4001 | Intro to Medical Laboratory Science |
| :--- | :--- |
| MLSP-4002 | Pathogenic Micro Practicum |
| MLSP-4003 | Clinical Pathogenic Micro |
| MLSP-4005 | Clinical Immunology, Immunohematology and Lab |
| MLSP-4011 | Urinalysis and Body Fluids |
| MLSP-4012 | Blood Bank Practicum |
| MLSP-4021 | Hemostasis |
| MLSP-4101 | MLS Certification Review |
| MLSP-4102 | Laboratory Management |
| MLSP-4103 | Clinical Chemistry |
| MLSP-4104 | Hematology and Lab |
| MLSP-4112 | Hematology, Coag, UA, BF Practicum |
| MLSP-4122 | Chemistry Practicum |
| MLSP-4132 | Misc Lab Practicum |

## ADMISSION TO THE MLS PROGRAM

Prior to admittance to the MLS program, a student must:

- Complete all courses with a grade of "C" or better
- Competitive applicants will have a minimum cumulative \& major GPA of 2.75
- Pass a federal background check, drug screen, and complete immunizations

Graduation with a major in Medical Laboratory Science does not guarantee passing the ASCP certification exam. Visit our website for a copy of the handbook for the MLS program, www.oc.edu/mls.

Students who have been convicted of a crime, other than a minor traffic violation, could be ineligible for admission to the university or for clinical rotations.

## UNIVERSITY CORE CURRICULUM: <br> B.S. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition I
ENGL-1213 English Composition II
COMM-1213 Oral Communication
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
BIBL-2202 Story of the Old
Testament
BIBL-2302 Story of the New Testament

BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions
Experience

| CAPSTONE, BIBL-4523 | 3 HOURS <br> Capstone: Christ and His World |
| :---: | :---: |
| POLITICAL SCIENCE, 3 HOURS |  |
| POLS-2113 | Introduction to |
|  | American Government |
|  |  |
|  |  |
|  |  |
| GREAT WORKS, 3 HOURS should include literature |  |
|  |  |
| ARTS-2013 | Survey of Visual Cultu |
| ARTS-2423 |  |
|  | Motion Pictures |
| COMM-2023 | History of Theater |
| ENGL-2213 | Perspectives in Literature |
| MUSC-2013 | Music Appreciation |

## SCHOOL OF NURSING

## AREAS OF STUDY

Nursing (NURS)

## DEGREES OFFERED

B.S.N. Degree in Nursing (Prelicensure Track)
B.S.N. Degree in Nursing (Competency Based Track)

## FACULTY

Jennifer Gray, Ph.D., Associate Dean of the Division of Health Sciences, Chair of the
School of Nursing, Professor of Nursing
Christy Hallock, M.S.N., Assistant Professor of Nursing
Dawn Hemphill, M.S.N., Assistant Professor of Nursing
Shawna Hood, M.S.N., Assistant Professor of Nursing
Rhea Ann Lee, M.S.N., Instructor of Nursing
Courtney McCoy, M.S.N., Assistant Professor of Nursing
Becky O'Neal, M.S.N., Assistant Professor of Nursing
Savannah Phillips, M.S.N., Instructor of Nursing
Trevy Rauch, M.S.N., Instructor of Nursing
Beth Scott, M.S.N., Assistant Professor of Nursing

## LOCATION

2nd Floor, Heritage Plaza Building

## ADMISSION TO THE NURSING PROGRAM, PRELICENSURE TRACK

In addition to meeting the criteria for admission to OC, you must meet the following requirements:

- A minimum GPA of 3.00
- Federal background check and drug screening
- TOEFL score of 500+, (PBT), 61+ (IBT), or IELTS 61+ for international students
- Required Immunizations
- A minimum grade of " $C$ " in each of the required support courses

Students who have been convicted of a crime, other than a minor traffic violation, could be ineligible for admission to the university or for licensure in the state of Oklahoma. Contact the nursing office for further information.

## TRANSFER STUDENTS

Students transferring from other colleges and universities are accepted on a competitive basis. A conference with the Registrar's Office and the School of Nursing is required. An individual curriculum plan will be developed for transfer students. All transfer student applicants who have been previously enrolled in a school of nursing program will be asked to submit additional documents, including a letter of good standing with eligibility to return from the previous school of nursing. See the Nursing Handbook for a complete description of requirements, fees, and information on advanced placement.

## Progression requirements:

In addition to meeting the general university requirements, nursing students must achieve a minimum grade of " $C$ " in each required support course and an overall GPA of 3.0. Once admitted, the student must maintain a 3.0 average each semester. Students who earn grades of " D " or " "F" in two NURS designated courses are discontinued from the School of Nursing.

## Licensure requirements:

Graduation with a B.S.N. does not guarantee licensure. Students must pass the NCLEX-RN to earn license.

The BSN program is approved by the Oklahoma Board of Nursing. Graduates of this state-approved program are eligible to apply to write the National Council Licensure Examination (NCLEX) for registered nurses. Applicants for Oklahoma licensure must meet all state and federal requirements to hold an Oklahoma license to practice nursing. In addition to completing a state-approved nursing education program that meets educational requirements and successfully passing the licensure examination, requirements include submission of an application for licensure, a criminal history records search, and evidence of citizenship or qualified alien status.

In addition, Oklahoma law only allows a license to be issued to U.S. citizens, U.S. nationals, and legal permanent resident aliens. Other qualified aliens may be issued a temporary license that is valid until the expiration of their visa status, or if there is no expiration date, for one year.

ADMISSION TO THE RN TO BSN PROGRAM, COMPENTENCY TRACK
A registered nurse (RN) with an associate's degree in nursing is eligible for an online, credit-hour competency-based program to earn a BSN through a subscription-period approach. Nine competencies have been identified that represent the curricular strengths of OC's nursing program and fill the gaps in knowledge between the associate level and baccalaureate level of nursing education. Tuition, the subscription fee, is paid for four months at a time, during which the student may complete as many sub-competencies as he or she is able. As all sub-competencies linked to a course are achieved, credit for the course will be awarded. The competencies require the completion of 40 sub-competencies to earn 28 hours of nursing courses and 3 hours of Bible, resulting in a baccalaureate degree in nursing science (BSN).

In addition to meeting the criteria for admission to OC, you must meet the following requirements:

- Accredited official transcripts verifying an A.A. or A.S. degree from an accredited university - maximum of 65 credit hours can be transferred from 2 year college.
- An overall cumulative GPA of 2.5
- Current United States R.N. licensure
- In Good Standing with the Board of Nursing in state of current licensure
- Documentation of a minimum of 2 years of experience working as an R.N. from employer
- Must have access to computer and high speed internet
- University Core Curriculum audit determined on an individual basis after the Registrar reviews official transcripts.

Students are accepted on a space available, competitive basis. A conference with the Office of the Registrar and the Nursing Department is required.

After admittance into the nursing program, a student must maintain a cumulative 2.50 GPA and a 2.50 major GPA. See the R.N. to B.S.N. Handbook for a complete description of requirements, fees, and information on advanced placement

## B.S.N. DEGREE IN NURSING (PRELICENSURE) <br> 92 HOURS

An OC graduate with a Bachelor of Science in Nursing degree will:

1. Exemplify Christian principles of compassion, service, integrity, and respect for the well-being of clients, peers, and self.
2. Synthesize critical thinking skills for professional nursing practice.
3. Communicate clearly, effectively, and appropriately with clients and other health care providers to promote positive client outcomes.
4. Provide appropriate and safe nursing care (clinically competent) to clients.
5. Demonstrate a leadership style consistent with academic preparation while adhering to the standards of the nursing profession.
6. Provide nursing care based on knowledge and appreciation of unique cultural variations.

Students must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

| 20 HOURS SCIENCE |  | NURS-2033 | Pharmacology |
| :--- | :--- | :--- | :--- |
| BIOL-1013 | Principles of Biology I | NURS-3013 | Pathophysiology |
| BIOL-2033 | Nutrition | NURS-3014 | Mental Health Nursing |
| BIOL-2523 | Anatomy and Physiology I | NURS-3015 | Adult Nursing I |
| BIOL-2623 | Anatomy and Physiology II | NURS-3024 | Maternal-Infant Nursing |
| BIOL-2624 | Principles of Microbiology | NURS-3025 | Adult Nursing II |
| CHEM-1104 | Introduction to Chemistry I | NURS-3034 | Health Care Missions and Christian Service |
| 3 HOURS MATHEMATICS | NURS-4005 | Community Health Nursing |  |
| MATH-1213 | College Algebra | NURS-4011 | Capstone in Nursing |
| 3 HOURS STATISTICS CHOSEN FROM | NURS-4015 | Child and Family Health Nursing |  |
| BIOL-2913 | Biostatistics | NURS-4022 | Issues and Trends in Nursing |
| MATH-2913 | Statistical Methods | NURS-4024 | Leadership and Management in Nursing |
|  | NURS-4025 | Adult Nursing III |  |
| 6 HOURS PSYCHOLOGY | NURS-4033 | Nursing Research and Evidence Based Practice |  |
| PSYC-1113 | General Psychology |  |  |
| PSYC-3523 | Developmental Psychology | After admittance into the nursing program, a student must maintain a cumulative |  |

60 HOURS NURSING

| NURS-1011 | Introduction to Nursing |
| :--- | :--- |
| NURS-2003 | Health Assessment |
| NURS-2013 | Fundamentals of Nursing |

## UNIVERSITY CORE CURRICULUM: B.S.N. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :---: | :---: |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major |  |
| MATH-1213 | College Algebra |
| REQUIRED BIBLE, 8 HOURS |  |
| BIBL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old Testament |
| BIBL-2302 | Story of the New Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

## INION, 9 HOURS

English Compos
COMM-1213
MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
$\begin{array}{ll}\text { BIBL-2202 } & \text { Story of the Old Testament } \\ \text { BIBL-2302 } & \text { Story of the New Testament }\end{array}$
BIBLE ELECTIVE, 5 HOURS
5 hours of Bible courses, except Missions Experience


| ENGL-2213 | Perspectives in Literature | MATH-2913 Statistical Methods |  |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { MUSC-2013 } \\ & \text { MUSC-3213 } \end{aligned}$ | Music Appreciation |  |  |
|  | Perspectives in World Music | DEVELOPM used in majo | TAL PSYCHOLOGY, 3 HOURS |
| SCIENCE, 6 HOURS |  | PSYC-3523 | Developmental Psychology |
| used in major |  | *For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25. |  |
| BEHAVIORAL used in major PSYC-1113 | SCIENCE, 3 HOURS |  |  |
|  |  |  |  |
|  | General Psychology I |  |  |
| ANATOMY \& used in major BIOL-2523 | PHYSIOLOGY, 3 HOURS |  |  |
|  |  |  |  |
|  | Anatomy and Physiology I |  |  |
| STATISTICAL | 3 HOURS |  |  |
| used in major |  |  |  |

## B.S.N. DEGREE IN NURSING (RN TO BSN COMPETENCY BASED TRACK) 93 HOURS

An OC graduate with a Bachelor of Science in Nursing degree will:

1. Exemplify Christian principles of compassion, service, integrity, and respect for the well-being of clients, peers, and self.
2. Synthesize critical thinking skills for professional nursing practice.
3. Communicate clearly, effectively, and appropriately with clients and other health care providers to promote positive client outcomes.
4. Provide appropriate and safe nursing care (clinically competent) to clients.
5. Demonstrate a leadership style consistent with academic preparation while adhering to the standards of the nursing profession.
6. Provide nursing care based on knowledge and appreciation of unique cultural variations.

Students must complete a minimum of 126 hours including the major, core, and minor if required. Elective hours may be needed to reach 126 hours.

## 20 HOURS SCIENCE

| BIOL-1013 | General Biology I |
| :--- | :--- |
| BIOL-2033 | Nutrition* |
| BIOL-2523 | Anatomy and Physiology I* |
| BIOL-2623 | Anatomy and Physiology II* |
| BIOL-2624 | Principles of Microbiology |
| CHEM-1104 | Introduction to Chemistry I ${ }^{*}$ |

6 HOURS MATHEMATICS

| MATH-1213 | College Algebra* |
| :--- | :--- |
| MATH-2913 | Statistical Methods |

6 HOURS PSYCHOLOGY
PSYC-1113 General Psychology** PSYC-3523 Developmental Psychology*

61 HOURS NURSING
NURS-1011 Introduction to Nursing**
NURS-2003 Health Assessment**
NURS-2013 Fundamentals of Nursing**
NURS-2033 Pharmacology**
NURS-3013 Pathophysiology
NURS-3014 Mental Health Nursing**

| NURS-3015 | Adult Nursing I ${ }^{* *}$ |
| :--- | :--- |
| NURS-3024 | Maternal-Infant Nursing** |
| NURS-3025 | Adult Nursing II** |
| NURS-3502 | Transitions to Professional Nursing |
| NURS-3512 | Transforming Care: Nursing Theory in Practice |
| NURS-3522 | Health Care and Christian Service |
| NURS-3533 | Treatment Modalities |
| NURS-4015 | Child \& Family* |
| NURS-4033 | Nursing Research and Evidence Based Practice |
| NURS-4503 | Health Promotion and Wellness |
| NURS-4513 | Go into all the World: Community Nursing |
| NURS-4523 | Christian Nursing Leadership |
| NURS-4532 | Trends and Issues for Professional Nurses |
| NURS-4542 | R.N. to B.S.N. Nursing Capstone |

After admittance into the R.N. to B.S.N. program, a student must maintain a cumulative 2.50 GPA and a 2.50 major GPA. For more information, refer to the R.N. to B.S.N. Student Handbook.

For additional information about the competency based RN to BSN program, contact the School of Nursing at (405) 425-1920.

## UNIVERSITY CORE CURRICULUM: B.S.N. - 55 HOURS - COURSES MAY NOT BE REPEATED WITHIN CORE

| COMMUNICATION, 9 HOURS |  |
| :--- | :--- |
| ENGL-1113 | English Composition I |
| ENGL-1213 | English Composition II |
| COMM-1213 | Oral Communication |
| MATHEMATICS, 3 HOURS |  |
| used in major |  |
| MATH-1213 | College Algebra |
| REQUIRED BIBLE, 8 HOURS |  |
| BILL-1212 | Life of Christ: Matthew |
| BIBL-1312 | Life of the Early Church: Acts |
| BIBL-2202 | Story of the Old Testament |
| BIBL-2302 | Story of the New Testament |
| BIBLE ELECTIVE, 5 HOURS |  |
| 5 hours of Bible courses, except Missions |  |
| Experience |  |

COMMUNICATION, 9 HOURS
ENGL-1113 English Composition
ENGL-1213 English Composition II

MATHEMATICS, 3 HOURS
used in major
MATH-1213 College Algebra
REQUIRED BIBLE, 8 HOURS
BIBL-1212 Life of Christ: Matthew
BIBL-1312 Life of the Early Church: Acts
$\begin{array}{ll}\text { BIBL-2202 } & \text { Story of the Old Testament } \\ \text { BIBL-2302 } & \text { Story of the New Testament }\end{array}$
BIBLE ELECTIVE, 5 HOURS
Experience


MATH-2913 Statistical Methods
DEVELOPMENTAL PSYCHOLOGY, 3 HOURS used in major PSYC-3523 Developmental Psychology
*For more information on how to apply study abroad trips to the core curriculum, see the chart on page 25 .

## MINOR REQUIREMENTS - COLLEGE OF NATURAL AND HEALTH SCIENCES

NATURAL SCIENCES

BIOLOGY MINOR 18 HOURS 18 HOURS OF BIOLOGICAL SCIENCES

## CHEMISTRY MINOR 18 HOURS

18 HOURS OF CHEMISTRY
Including at least six hours numbered 3000 or above.
NUTRITION AND EXERCISE SCIENCE 18 HOURS
7 HOURS REQUIRED
NESP-3033
NESP-3231
NESP-3233
Exercise Testing and Prescription
Exercise Physiology Lab
Exercise Physiology

11 HOURS CHOSEN FROM
BIOL-1115 General Biology I, Cellular and Molecular Systems
BIOL-2214 Human Anatomy
BIOL-3224 Human Physiology
NESP-3023 Biomechanics
NESP-3123 Health Issues
NESP-4123 Nutritent Metabolism
NESP-4133 Nutrition and Exercise

PHYSICAL SCIENCES MINOR 18 HOURS
18 HOURS OF PHYSICAL SCIENCE
Including any combination of chemistry, general science, and physics. Including at least six hours numbered 3000 or above.


While OC will attempt to offer every course when noted in the catalog, there will be times when a course may not be offered when noted in the catalog or when a course might be offered at a time other than when noted in the catalog. Students are advised to check each semester's course schedule and to confer with their advisors regarding particular courses

## ACCOUNTING (ACCT)

## 2113 ACCOUNTING PRINCIPLES I

Purpose of accounting, recording transactions, preparing financial statements, the use of special journals and general and subsidiary ledgers, introduction of accounting principles, accounting for a merchandising firm, and payroll accounting. This course is normally offered every semester.

## 2213 ACCOUNTING PRINCIPLES II

Prerequisite: ACCT-2113.
Continuation of Accounting Principles I. Partnership accounting, corporation accounting, additional accounting principles, analyzing and interpreting financial statements, development of management decision-making accounting data, introduction to cost accounting, and cost-volume-profit analysis. This course is normally offered every semester.

## 3113 INTERMEDIATE ACCOUNTING I

Prerequisite: ACCT-2213.
Study of accounting theory and assumptions underlying Generally Accepted Accounting Principles related to financial statements, generally, and current assets, specifically.
Special consideration is given to pronouncements of the Financial Accounting Standards
Board, the American Institute of Certified Public Accountants, the American Accounting
Association and the Securities and Exchange Commission. This course is normally offered fall semester.

## 3213 INTERMEDIATE ACCOUNTING II

## Prerequisite: ACCT-3113.

Continuation of Intermediate Accounting I. Study of Generally Accepted Accounting Principles related to plant assets, liabilities and capital, financial statement analysis, price level accounting, and leasing transactions. This course is normally offered spring semester.

## 3313 COST ACCOUNTING

Prerequisite: ACCT-2213.
The development of cost and accounting data for internal use in planning, control, and decision making by managers. Topics and techniques studied are job-order and process cost accounting; accounting for materials, labor, and factory overhead costs; standard cost accounting; payroll; budgeting; responsibility accounting; cost-volume-profit analysis, and direct costing. This course is offered every semester.

## 3323 MANAGERIAL ACCOUNTING

Prerequisite: ACCT-2213.
Study of the use of cost accounting data as a tool for planning, control, and decision making by managers. Topics studied include the nature of costs and their behavior; design of job-order and process cost accounting systems; cost-volume-profit relationships and profit planning; segmented reporting; comparison of direct costing with absorption costing; control of operations through standard costs and flexible budgets; pricing of products and services; relevant costs for decision-making and capital budgeting. This course is offered as needed.

## 3413 INCOME TAXATION

Prerequisite: ACCT-2213.
An introduction to the federal income tax, considering income, deductions, payment of tax, and other matters relating to personal income tax returns. This course is normally offered fall semester.

## 3513 ADVANCED FEDERAL TAXATION

Prerequisite: ACCT-3413.
A continuation of the study of the federal income tax as it relates to corporations, partnerships and fiduciaries. Also included is the study of more specialized income tax problems and the federal Social Security, estate, and gift taxes. This course is normally offered spring semester.

## 3713 ACCOUNTING INFORMATION SYSTEMS

## Prerequisite: ACCT-3113.

Concepts underlying the analysis, design, use, control and audit of accounting information systems. The flow of accounting information through computerized information systems is emphasized. This course is normally offered in the spring semester.

## 4113 ADVANCED ACCOUNTING I

## Prerequisite: ACCT-3113.

A study of the application and theory of budgetary and fund accounting, with emphasis on governmental and not-for-profit entities. Other specialized accounting applications involving foreign operations and partnership accounting are also examined. This course is normally offered fall semester.

## 4213 ADVANCED ACCOUNTING II

Prerequisite: ACCT-3113.
A study of advanced accounting problems related to consolidations, mergers, acquisitions, branch operations, segment reporting, interim reporting, and the Securities and Exchange Commission. This course is normally offered in the spring semester.

## 4313 ADVANCED COST ACCOUNTING

Prerequisite: ACCT-3313.
Additional study in the development of cost and managerial accounting data for use in planning, control, and decision making by managers. The course includes the use of such tools as linear regression, simulation, and linear programming. It also covers capital budgeting, segment performance, and decision-making behavior under uncertainty. This course is normally offered in the summer semester.

## 4413 AUDITING

Prerequisite: ACCT-3113.
Preparation toward a professional accounting career as a Certified Public Accountant in examining and rendering professional opinions on the fairness of organizations' financial statements. The course emphasizes the nature of auditing, internal control systems, auditing techniques and evidence, audit working papers and reports, and professional ethics and independence. This course is normally offered in the fall semester.

## 4423 ETHICS AND AUDITING CONCEPTS

Prerequisite: ACCT-3113.
The course is designed to help students cultivate the ethical commitment needed to ensure that their work meets the highest standard of integrity, independence, and objectivity. Detailed analysis of the need for integrity as the basis for ethics will be covered, as will the various concepts of ethical reasoning. Ethical decision making in business and accounting will be explored, with emphasis given to the areas of independence and objectivity. This course is normally offered in the summer semester.

## 4433 INCOME TAX PLANNING AND RESEARCH

Prerequisite: ACCT-3513.
A specialized study in the areas of tax planning and research. Emphasis is given to legal ways to minimize tax liability through yearly planning, elections, and deferral of income. Extensive computerized tax research is performed to aid in tax planning. This course is offered as needed.

## 4513 FINANCIAL ACCOUNTING STATEMENT ANALYSIS

Prerequisite: ACCT-3113.
An in-depth study of contemporary accounting theory with primary emphasis on the pronouncements of the Financial Accounting Standards Board. The main objective is to gain deeper insights into the theory and critical analysis underlying Generally Accepted Accounting Principles and to apply them to financial statement preparation. Study centers on selected parts of the following FASB pronouncements: 1. statements of Financial Accounting Standards, 2. interpretations of ARBs, APB Opinions and FASB Statements of Standards, 3. technical bulletins, and 4. statements of Financial Accounting Concepts. This course is normally offered in the spring semester.

## 4900 INDEPENDENT STUDY IN ACCOUNTING

Assigned readings, reports and research projects based on the needs of the student. A maximum of 3 hours may be counted toward major. 1-3 semester hours; 50 hours work required for each hour of credit earned, with a maximum of 3 credit hours. This course is offered as needed.

## 4990 INTERNSHIP IN ACCOUNTING

Prerequisites: Admission to College of Business Administration Upper Division, completion of ACCT-3113 and approval of the advisor and dean. Supervised and approved accounting internship with firm or organization; written and oral reports are required along with employer evaluation. 30 hours of work required for each hour of credit with a maximum of 3 credit hours. This course is offered as needed.

## ART \& DESIGN (ARTS)

## 1103 TECHNOLOGY FOR GRAPHICS

An introduction to the use of computer hardware, software, and peripherals for the production of visual images. Students research and practice computer operations and produce digital visuals using both painting and drawing software applications. This course is normally offered every semester.

## 1113 FUNDAMENTALS OF DRAWING

An introduction to the fundamental approaches to drawing with attention given to the concepts and processes that constitute the language of visual expression. This course is normally offered in the fall semester.

## 1213 FIGURE DRAWING

A study of the human form with attention given to the concepts and processes that
constitute the language of visual expression. This course is normally offered in the spring semester.

## 1413 ELEMENTS OF VISUAL THINKING

A study of the elements of art. Studio work includes two-dimensional experimentation and exercises that nurture creative visual expression, which integrate critical discourse through the development of the language of art and design. This course is normally offered in the spring semester.

## 1623 INTRODUCTION TO INTERIOR DESIGN

An overview of the interior design profession and an introduction to basic graphic communication skills, including hand drafting, with experiences in observing professional designers, producing scaled drawings of floor plans, and application of the elements and principles of design. This course is normally offered in the fall semester.

## 1643 INTERIOR TEXTILES, MATERIALS, AND FINISHES

A study of interior textiles (fabrics and upholstery). Fabric content, properties, construction process, dyeing, and printing are examined. Basic building materials (wood, glass, metal, masonry, etc.) as well as wall coverings and hard floor treatments and their properties and uses will be addressed. Students will learn through case studies and examples to measure and figure correct amounts of materials to order. This course is normally offered in the spring semester.

## 1653 COMPUTER AIDED DESIGN

Prerequisites: ARTS-1623, permission of instructor.
Use of industry software in the creation of two-dimensional representation of built forms and spaces for interiors. This course is normally offered in the spring semester.

## 2013 SURVEY OF VISUAL CULTURE

Survey of Visual Arts is an introductory art appreciation course that will overview the major works of art and cultural ideas from a global perspective. Lectures and presentations will cover a broad range of disciplines including painting, architecture, film, photography, product design, graphic communication, and digital design. This course is normally offered in the spring semester.

## 2123 RENDERING IN PERSPECTIVE

Prerequisites: ARTS-1623 and ARTS-1643 or permission of instructor.
A study of rendering materials, methods, and techniques and how they relate to a 1-, 2-, 3-point perspective. The course will explore color theory as well as shade and shadow elements as they are used with various mediums such as marker, colored pencil, ink, and mixed mediums. Advanced problems in rendering and visual presentation are explored throughout the course. This course is normally offered in the spring semester.

## 2133 INTRODUCTION TO GAME TECHNOLOGY

Prerequisites: ARTS-2743.
Introduction to the tools and technology for developing 3D digital models, characters, animations, and environments to be used in realtime interactive media such as games and simulations. Basic drawing skills and knowledge of 3d modeling or similar 2D graphics software are required.

## 2143 DIGITAL PAINTING

Pre-requisite: ARTS-2743.
This course introduces digital painting and the use of popular computer painting software, covering both basics of the program and onscreen painting. The class focuses on the image manipulation and painting tools and translates traditional painting techniques to the computer. Exercises emphasize techniques that enhance students' understanding of the software interface, ability to visualize and sketch out compositions, control light and value, and create a representational image. The process taught has direct application to illustration, feature films, video games, graphic novels, etc. Additionally, students learn about visual communication and how to expand their ability to communicate their visual ideas to collaborators.

## 2223 INTRODUCTION TO COMMUNICATION DESIGN

Prerequisites: ARTS-1103 and ARTS-1413.
An introduction to the advertising, graphic design, and new media industry. Studio work includes print media design and graphic design with directed outcomes based upon research, strategy-based conceptualization, and execution. This course is normally offered in the fall semester.

## 2233 TYPE AS VISUAL LANGUAGE

Prerequisites: ARTS-2223 and ARTS-2323
A study of letterforms and fundamental typographic principles. Studio work includes typographic expression and communication with and without image and its relationship to message and purpose. This course is normally offered in the spring semester.

## 2243 INTERACTIVE MEDIA DESIGN I

Prerequisite: ARTS-1103 and ARTS-1413.
Introduction to the aesthetic and technical concerns of interactive media production: human-computer interactivity, website design and development, usability issues, and dynamic narrative. Students design, produce, and deploy interactive projects. This course is normally offered in the fall semester.

2323 DIGITAL DESIGN FOR PRINT
Prerequisites: ARTS-1103 and ARTS-1413.
Use of digital design tools for the production of single-page and multi-page printed documents: print advertising, marketing, and stylized content delivery. This course is normally offered in the fall semester.

## 2423 HISTORY OF PHOTOGRAPHY AND MOTION PICTURES

This class entails a chronological study of the photographic arts and motion pictures.
The course content examines the technological innovations and famous innovators
from photography's introduction. Lectures analyze photos and motion pictures from various critical/historical perspectives to offer a comprehensive overview of important photographers, fine artists, photojournalists, and film makers of the modern age. This course is offered in the fall semester.

## 2443 CONSTRUCTION MATERIALS AND DETAILS

Prerequisites: ARTS 1623 and 1643 preferred but not required.
This course is a study of materials used in the design of interior spaces. It includes fireresistant qualities, acoustical properties and the construction of materials used in finishes and furnishings, as well as qualities important to sustainable design issues. Emphasis on writing specifications for FF\&E for non load bearing construction. Emphasis is also placed on technical, construction drawings to include elevations, section drawings, etc. The course is normally offered in the fall semester of odd numbered years.

## 2513 PAINTING I

Prerequisites: ARTS-1113, ARTS-1213, and ARTS-1413 or permission of instructor. A study of materials, techniques, and concepts fundamental to painting. The course encourages students to originate and produce a portfolio of paintings experimenting with various processes and historical ideas. This course is normally offered in the spring semester.

## 2523 DIGITAL SCULPTING

Prerequisites: ARTS-2743.
A study of the elements of art and their supportive elements. Studio work includes threedimensional experimentation and exercises that relate ideas, objects, material, and space with form studies that examine organic and constructed elements. This course is normally offered in the fall semester.

## 2623 RESIDENTIAL INTERIOR DESIGN

Prerequisites: ARTS-1113, ARTS-1413, ARTS-1623, ARTS-1653 or concurrent enrollment. A study of residential design with emphasis on kitchen and bath planning. This course is normally offered in the fall semester.

## 2653 SPACE PLANNING AND CODES

Prerequisites: ARTS-1623, ARTS-1653.
A study of the application of human factors, space standards, and space planning principles to residential and commercial environments. This course is normally offered in the spring semester.

## 2663 ARCHITECTURAL GRAPHICS

Prerequisites: ARTS-1643.
Further development of drafting skills with emphasis on hand lettering, dimensioning, materials delineation of floor plans, drawing elevations, sections, and perspectives. This course is normally offered in the spring semester.

## 2743 3D MODELING I

Prerequisites: ARTS-1103 or CMSC-1113.
Creation of virtual objects and environments. Students use the computer to model, texture, light, render, and animate dynamic objects and scenes in digital three-dimensional space. For gaming and animation majors, this course is normally offered in the spring semester. For interior design majors, this course is normally offered in the fall semester.

## 2753 TEXTURING, RENDERING, AND LIGHTING <br> Pre-requisite: ARTS-2743

A studio course focused on 3D lighting and surfacing techniques using industry standard software. Topics covered include the relationship between surface and light, the effects of lighting and surfacing on a 3D scene, types of lights and shadows, surface qualities, textures, and mapping, and industry lighting techniques, including recreating real-world lighting. Students will also learn lighting and surface design and workflow management.

## 3033 CHRISTIAN AESTHETICS IN THE VISUAL ARTS

Prerequisite: Junior or Senior Standing.
A seminar course addressing a Christian response to contemporary cultural issues in the visual arts.

## 3113 PRINTMAKING: INTAGLIO AND RELIEF

Prerequisites: ARTS-1213 and ARTS-1413.
Designed to introduce you to the tools, history, and basic techniques of printmaking through the use of the etching press. Etching, drypoint, collograph, relief, and monotype techniques will be discussed. Students are encouraged to explore the problems and concerns of their own images technically through multiples and one-of-a-kind prints. A series of critiques, group discussions, research and information gathering assignments, lectures and demonstrations complement studio work. This course is normally offered in the fall semester.

## 3123 PRINTMAKING: SERIGRAPHY

Prerequisite: ARTS-1213, ARTS-1413.
Designed to introduce you to a survey of screen-printing techniques including hand-cut, painted and photographic stencils and multi-color printing. This course is an introduction examination of water-based serigraphic techniques, concentrating in process and aesthetic development. Monotype and monoprint techniques will also be discussed. A series of critiques, group discussions, research and information gathering assignments, lectures and demonstrations complement studio work. This course is normally offered in the spring semester.

## 3163 ANIMATION PRINCIPLES

Prerequisite: ARTS-1103 and ARTS-2743.
History, theory, and technique of traditional and contemporary approaches to animation. Includes studies in fundamentals of digital storytelling, physics, animation aesthetics, expression, kinetics, and motion. Projects include work in digital 2D and 3D, stop-motion, rotoscoping, and other animation environments. This course is normally offered in the fall semester.

## 3173 3D MODELING AND ANIMATION II

Prerequisite: ARTS-2743 and ARTS-3163.
In this course students will study and practice techniques used in character design, modeling, and rigging using 3D computer software. Advanced 3D modeling, shading, rendering, and character-design skills are developed in conjunction with traditional story, animation, lighting, and cinematography methods. Designs for game animation will be compared with designs for film and video. Action and motion sequences will be created and studied. This course is normally offered in the spring semester.

## 3213 PAINTING II

Prerequisite: ARTS-2513.
A further study of the techniques and processes of painting with special attention to the development of the student's direction and portfolio development. This course is normally offered in the spring semester.

## 3243 GRAPHIC DESIGN

Prerequisite: ARTS-2233.
A study of integrating message, typography, and image through conceptual innovation. Studio work includes necessary vehicles for information, narrative, promotion, and marketing. This course is normally offered in the fall semester.

## 3253 PRINT AND SOCIAL MEDIA DESIGN

## Prerequisite: ARTS-3243.

A study of merging written messages with design. Studio work includes media bought print applications with ancillary forms of design communication. This course is normally offered in the fall semester.

## 3263 ADVANCED GRAPHIC DESIGN

Prerequisite: ARTS-3243.
A further study of blending messages and content with design and application. Studio work is a continuation of necessary vehicles for information, narrative, promotion, and marketing, sometimes in relation to integrated design through several platforms of communication. This course is normally offered in the spring semester.

## 3333 HISTORY OF DESIGN

A comprehensive chronological survey of the impact and transformation of design upon Western civilization. Ideas and changes are explored through disciplines such as graphic design, industrial design, product design, photography, architecture, furniture, and fashion. This course is normally offered in the spring semester.

## 3343 ANCIENT TO MODERN ART HISTORY

A focus on the pivotal artists, movements, and concepts from each era. Art, as it has been shaped by cultural, social, political, and economic factors will be examined in a chronological study from pre-history to mid-twentieth century. This course is normally offered in the fall semester of even-numbered years.

## 3353 CONTEMPORARY ART

A chronological study of modern art from 1945 to the present. In-depth study will be on the many artists, movements, critical theories, cultural conditions, and global issues that have shaped art of the modern and postmodern age. This course is normally offered in the fall semester of odd-numbered years.

## 3363 PHOTOGRAPHYI

Course will focus on production of portfolio/exhibition quality photographic images. Students will work in a digital format with an emphasis on developing/exploring personal direction in fine art photography. This course is normally offered in the fall semester.

## 3383 MOTION IMAGERY

Prerequisite: ARTS-2743 and ARTS-3173.
Introduces students to the principles and elements of motion design through studio practices at beginning and advanced levels. The first phase, "type in motion," emphasizes the relationship between typography principles and animation fundamentals. The second phase is an advanced applied approach to the language and principles of motionbuilding upon existing knowledge in the first phase: synthesizing the language of motion simultaneously with an emphasis on narrative and narrative structure. In addition to stressing systems, structure, and synthesis of text and image for time-based media, the
course also provides knowledge and skills in digital creativity. This course is offered in the spring semester.

## 3393 GAMING HISTORY AND DEVELOPMENT

This course provides a historical and critical approach to the evolution of video game design and animation from its beginnings to the present. It brings together cultural, business, and technical perspectives. Students should come away from the course with an understanding of the history of this medium, as well as insights into design, production, marketing, and sociocultural impacts of interactive entertainment and communication. The course will offer reading, discussion, guest presentations and projects on the developing culture and technology of animation and video game design. Historical contexts include entertainment media, computing technology, applications of gaming technology, and business history. This class will be offered in the fall semester.

## 3423 HISTORY OF ANIMATION

This course provides a historical and critical approach to the evolution of animation from its beginnings to the present. It brings together cultural, business, and techincal perspectives. Students should come away from the course with an understanding of the history of this medium, as well as insights into design, production, marketing, and socio-cultural impacts of sequential based storytelling and communication. The course will offer reading, discussion, guest presentations and projects on the developing culture and technology of animation. This course is normally offered in the summer semester.

## 3443 INTERACTIVE MEDIA DESIGN II

Prerequisite: ARTS-2243.
Study of interactive design and further exploration into production capabilities of industry standard web authoring software. Topics include: dynamic content, file management, internet typography, development of user interfaces, site maps, external web functionality and trouble-shooting. This course is intended for designers who wish to consolidate and apply their prior knowledge and skills of interactive design. This is a culminating experience and designers are expected to demonstrate sophisticated interactive design decisions and produce final works that demonstrate a high level of expertise and achievement. This course is normally offered in the spring semester.

## 3453 TEAM GAME PRODUCTION I

Prerequisite: ARTS-2743 or instructor permission.
This course provides a foundation in the game development process, including planning, pipelines, and documentation for game projects, game technology, artificial intelligence, and user interface design, game testing, project and asset management, team dynamics, and usability analysis. Students apply game design and development skills to create a 2D and 3D game demo as part of small project teams. This course is offered in the fall semester.

## 3513 GRAPHIC ARTS PRODUCTION

Prerequisite: ARTS-3263.
An introduction to a basic understanding of preparing art for reproduction through textbook material, lectures, and an internship. This course is normally offered in the summer semester.

## 3523 ILLUSTRATION I

Prerequisites: ARTS-1213.
A study of materials, techniques, processes, and ideas fundamental to the discipline of illustration, with special attention to creating selected works for editorials, posters, covers, and collateral materials. This course is normally offered in the fall semester.

## 3533 HISTORICAL INTERIOR DESIGN I

A study of decorative arts, furniture, and interiors as they have evolved from ancient Egypt up to the Italian Renaissance. Emphasis is given to the ways ancient motifs and decorative designs have been continually repeated and used from the original historic periods to the present. This course is normally offered in the fall semester of even numbered years.

## 3543 HISTORICAL INTERIOR DESIGN II

A study of historical periods, surveying the Italian Renaissance through the 18th Century; acquainting students with terminology, motifs, furniture, architecture, and stylistic differences as they relate to the time periods. This course is normally offered in the spring semester of odd numbered years.

## 3613 INTERIOR SYSTEMS

Prerequisites: ARTS-1623 and ARTS-1653.
A study of interior lighting design, acoustics, fire suppression, plumbing, electric, and
HVAC (heating, ventilation and air conditioning) systems. Projects are assigned to help
students learn how to use these systems and develop coordinating contract documents.
The course also covers natural energy sources with attention to insulation techniques and the structural types of passive-solar and earth-sheltered. This course is normally offered in the spring semester.

## 3623 COMMERCIAL DESIGN I

Prerequisites: ARTS-1643. ARTS-1653, and ARTS-2653.
A study of contract/commercial design and space planning principles. Projects involve public or business spaces, with barrier-free design principles included. Drafting and presentation skills are further reinforced. This course is normally offered in the fall semester.

## 3633 CONTEMPORARY INTERIOR DESIGN

A study of design movements affecting furniture and interiors from 1900 to present, emphasizing the evolution in design concepts and philosophies of eminent architects and designers. This course is normally offered in the fall semester of odd-numbered years.

## 3643 COMMERCIAL DESIGN II

## Prerequisite: ARTS-3623

A study of non-residential interiors with an emphasis on programming, light safety and building codes, barrier-free design and space and activity planning of the interior environment. This course is normally offered in the spring semester.

## 3773 THE BUSINESS OF BRANDING YOURSELF

Prerequisite: Junior standing.
A study directed to the challenges of seeking employment in creative industries after graduation, establishing a business, and developing healthy professional and personal finance practices. This course is normally offered in the spring semester.

## 4213 OPEN STUDIO

Prerequisite: ARTS-3213.
Advanced painting course emphasizing the production of finished portfolio with preparation of student's senior exhibition. This course is normally offered in the fall semester.

## 4223 GAMING AND ANIMATION STUDIO

Prerequisites: ARTS-3173, ARTS-3453, Senior standing and permission of instructor. Students participate in the new media production process for design and development of client driven projects in a team environment. This course is normally offered in the fall semester.

## 4253 INTEGRATED MARKETING DESIGN

Prerequisite: ARTS-3253.
A study of integrating various vehicles of communication into a single message. Studio work includes advertising, graphic design and new media design to market a product, service or idea based upon research and strategy-based concepts. This course is normally offered in the spring semester.

## 4333 COMMERCIAL STUDIO PHOTOGRAPHY

Prerequisite: ARTS-2403 and ARTS-3363.
Students will work in a digital format with an emphasis on producing a professional portfolio of photographic images encompassing fine art and commercial applications. As a final studio course, students will be required to submit work to national photographic competitions and public exhibitions. This course is offered as needed.

## 4523 ILLUSTRATION II

Prerequisite: ARTS-3523.
An advanced illustration studio class that concentrates on producing and refining a body of work to augment the student's portfolio. Continued focus on traditional vehicles of illustration such as editorials, posters, and collateral materials and exploration of nontraditional approaches to the illustration medium. This course is normally offered in the spring semester.

## 4613 INTERIOR DESIGN PROFESSIONAL PRACTICES AND PORTFOLIO

 Prerequisite: ARTS-3643.A history and introduction of interior design career management focusing on professional responsibilities, professional organizations, management of office processes, client relationships, and overview of establishing and organizing a business. This course will culminate with a portfolio presentation to a panel of professionals. This course is normally offered in the spring semester.

## 4633 SENIOR INTERIOR DESIGN STUDIO

Prerequisite: ARTS-3643, Senior standing.
Designing interior solutions related to non-residential interiors. This senior-level course will also survey business procedures, contract services, and administration and preparation for job market entry as applied to the practice of Interior Design. This course is normally offered in the fall semester.

## 4643 SENIOR EXHIBIT

Prerequisite: Senior standing and instructor's permission.
A showing of visual works developed over the course of the student's college years. This exhibit and reception are the culmination of the student's collegiate experience. This course is offered as needed.

## 4663 GAMING AND ANIMATION CAPSTONE

Prerequisite: ARTS-3173 and ARTS-4223.
Examination of gaming + animation topics related to ethical concerns includes: portfolio and resume development, preparations for the workforce and/or graduate studies, and conducting results with the class. This course is offered in the spring semester.

## 4810 GRAPHIC DESIGN INTERNSHIP

Prerequisite: ARTS-3243.
An internship with an advertising agency or graphic design studio. 1 credit hour for every 50 hours the student works, not to exceed 3 credit hours per semester. This course is offered as needed.

## 4820 INTERIOR DESIGN INTERNSHIP

Prerequisite: Junior or Senior standing.
An internship with a residential or commercial design firm. 1 credit hour for every 50 hours of student work, not to exceed 3 credit hours per semester. This course is offered as needed.

## 4830 ART INTERNSHIP

Prerequisite: Junior or Senior standing.
An internship with a gallery, museum, theme park, theater production company, frame shop or art supply company. 1 credit hour for every 50 hours the student works, not to exceed 3 credit hours per semester. This course is offered as needed.

## 4840 GAMING AND ANIMATION INTERNSHIP

Prerequisite: Permission of instructor.
An internship with a new media department. 1 credit hour for every 50 hours the student works, not to exceed 3 credit hours per semester. This course is offered as needed.

## 4900 INDEPENDENT STUDY

Prerequisites: Junior or Senior standing and permission of instructor.
Provides opportunity for the well-qualified student to do supervised individual work in an area of special interest. Either art history or studio areas may be chosen. (1-3 hours) This course is offered as needed

## BIBLE (BIBL)

## 1103 INTRODUCTION TO THE BIBLE I

Prerequisites: Permission of instructor.
Introduces students who have little or no familiarity with the Bible or the Christian faith to the basic message, concepts and characters. The course, along with Introduction to the Bible II, prepares students to enter the regular core Bible curriculum the following year. This course is normally offered in the fall semester.

## 1202 INTRODUCTION TO CHILDREN'S MINISTRY

A study of the history of the child in the Bible and the unique aspects of the profession of Children's Ministry. This course is normally offered in the spring semester. Same as CMIN-1202.

## 1203 INTRODUCTION TO THE BIBLE II

Prerequisite: Permission of instructor.
This course is a continuation of BIBL-1103 and is also intended for students with little or no familiarity with the Bible. Students will continue learning the basic message, concepts, and characters of the Bible. This course is normally offered in the spring semester.

1212 LIFE OF CHRIST: MATTHEW
This course aims to help students from all backgrounds make a smooth transition into the Oklahoma Christian community of scholarship. It will be built around a textual study of the Gospel of Matthew, and will include an introduction to the reasons why Christians put their trust in Christ and in scripture. Through a study of the text of Matthew's Gospel and through small group meetings led by upperclassmen, students will be introduced to Christian teachings about relationships, integrity, and other topics which can help them gain the most benefit from Christian higher education.

## 1312 LIFE OF THE EARLY CHURCH: ACTS

A study of the establishment and growth of the early church. Emphasis is placed on the major Christian doctrines taught in the first century and the application of those doctrines to the life of the early church. This course is normally in the offered spring semester.

## 2122 TEACHING THE BIBLE TO PRESCHOOLERS

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to children from birth through age five. This course is normally offered in the fall semester. Same as CMIN-2122.

## 2202 STORY OF THE OLD TESTAMENT

Begins with a survey of periods of Bible history to provide a structure to connect the Bible story from creation through redemption by Christ and the early history of the church. The course develops the first twelve periods which cover the Old Testament. This study considers essential scripture texts in each period, principles in interpreting these scriptures, and related history and archaeology. This course is normally offered in the fall semester.

## 2302 STORY OF THE NEW TESTAMENT

Follows Story of the Old Testament and develops the last three periods of Bible history: intertestamental, life of Christ and history of the early church. The course also studies briefly the history of the church since the end of the first century, including both the Reformation Movement and the Restoration Movement. The course also discusses important current issues in the church. This course is normally offered in the spring semester.

## 2312 EVIDENCES OF CHRISTIANITY (APOLOGETICS)

A study of the evidences for the existence of God and Christ as God's supreme revelation. Emphasis is given to providing a modern case for the existence of the God of the Bible. Non-textual. This course is normally offered in the fall semester.

## 2512 PERSONAL EVANGELISM

Includes the methods and approaches for doing personal Bible instruction along with intensive study on the biblical issues that typically arise in doing such studies. Non-textual. This course is normally offered every semester.

## 2713 INTRODUCTION TO MINISTRY

Introduces the ministerial student to Christian ministry in general, with special emphasis on the ministries of pulpit, religious education, and youth. Study focuses on the biblical basis for ministry, management skills, people skills, and personal growth. Reading and writing assignments allow the student to emphasize the ministry of choice. Non-textual. This course is normally offered in the fall semester.

## 3002 GENESIS AND EXODUS

A study of God's work in creation and in establishing his eternal plan of salvation. The following subjects are covered: the biblical account of creation with a study of alternate beliefs such as the theory of evolution, science and faith, the nature of man, temptation and fall, the flood, the call of Abraham and the beginning of the Israelites, the doctrine of divine election, the bondage and the exodus, the Ten Commandments and basic morality, type and ante type of the tabernacle. This course is normally offered in the spring semester of odd numbered years.

## 3003 VOCATIONAL MINISTRY

A course that examines a range of issues related to Christian ministry when it is not fully remunerated by a church or parachurch agency. Emphasis is placed on applying one's gifts and talents in diverse fields of endeavor that are commonly viewed as "secular" but with the explicit goal of building up the kingdom of God worldwide. Non-textual. Same as MISS3003. Normally offered fall semester of odd numbered years.

## 3013 HERMENEUTICS

## Prerequisite: BIBL-3203.

A study of the valid rules and principles governing correct biblical exegesis and application. The course is designed to lead the student into a better understanding of how to make applications of biblical teachings and principles. This course is normally offered spring semester.

## 3033 MISSION PREPARATION

A course taught by one who has served as a missionary. The following subjects are treated: the New Testament concept of missions and missions today; a description of the work of a missionary; doctrinal preparation for the mission field; emotional preparation; spiritual preparation; preparing the supporting home church missionary cycle, entering the host country; communicating with the home church; effective missionary methods for various fields; maintaining physical, mental, emotional, social, and spiritual health in the mission field. Non-textual. Same as MISS-3013. This course is normally offered in the spring semester of odd numbered years.

## 3042 PARABLES OF JESUS

A detailed study of the parables of Jesus emphasizing their message against their literary and historical backgrounds, especially their social and cultural context.

## 3043 BIBLICAL MISSIONS METHODS

The primary assumption of this course is that Christian Scripture witnesses to God who created the world, deeply cares for the world, is active in the world, and has a purpose for creation. In other words, the Bible witnesses to the God of missions. This course will examine Biblical theology (Who is God?), identify (Who are we?), and practice (What is God doing? What are we doing?) within a variety of contemporary cultures and contexts. Emphasis will be given to discerning missional identities, theologies and practices in the Biblical narrative, and God's activity in the world through the Spirit and in various cultural contexts. Same as MISS-3003. Normally offered fall semester of odd numbered years.

## 3053 CHRISTIANITY AND CULTURE

This course helps students to see that it was God's plan to bless the nations of the world through the culture of the church that is universally adaptable, but that universal culture needs to be distinguished from particular expressions of what it means to be God's church within any specific global context, including the student's own. This course is normally offered on a study abroad trip.

## 3063 EVANGELISM \& DISCIPLESHIP

This course will explore the theology and practice of Christian evangelism and discipleship. Emphasis will be given to narrative approach to evanglelism and the practices of discipleship that form people into God's narrative for the world in Jesus Christ.

## 3102 I CORINTHIANS

A thorough analysis of Paul's epistle to the church at Corinth. Special emphasis is given to the problems faced by Christianity in a pagan center and to the application of Christian principles in solving various disorders in conduct and doctrine in a local church. This course is normally offered in the spring semester of odd numbered years.

## 3113 THE NEW TESTAMENT CHURCH

A study of the sociological characteristics of the first century church with special attention to various New Testament letters and to the Gospels' descriptions of the church's organization, mission work, worship, and destiny. Non-textual. This course is normally offered in the spring semester of odd numbered years.

## 3143 THE SCIENTIFIC CHRISTIAN

Prerequisites: Junior or Senior standing, science or engineering major, or permission of instructor.
Especially designed to help science majors who are Christians explore the relationship between faith and science. Many Christian college graduates who are trained in the sciences and are also active church members report that people seem to expect them to be able to answer all the hard questions about science and Christianity. This course is not designed to answer all the hard questions, but it is designed to assist Christians in thinking about their own responses to them. This course is normally offered in the fall semester of even numbered years.

## 3153 CHURCH GROWTH

A study of the dynamics of the intersection between gospel, church, and culture. Emphasis will be given to how the gospel engages cultures through the life and witness of the church. Same as MISS-3213. Non-textual. This course is normally offered in the fall semester of even numbered years.

## 3163 URBAN MINISTRY

An examination of diverse aspects of ministry within urban contexts both in the United States and abroad. Topical areas covered include cities in the Bible, principles of urban evangelism and missions, urban church growth, and ministry in contexts of ethnic, racial, and socioeconomic diversity. Non-textual. This course is normally offered in the spring semester of even numbered years.

## 3173 CHURCH HISTORY TO 1517

A comprehensive historical survey of the Christian religion from its beginning to the 16th century Reformation. Special emphasis is given to the nature of the early church, later doctrinal controversies, papal development, and outstanding personalities of this period. Non-textual. This course is normally offered in the fall semester of even numbered years.

## 3183 CHURCH HISTORY 1517 TO PRESENT

A continuation of BIBL-3173 dealing with Christian history from the sixteenth-century Reformation to the present, with emphasis on the nineteenth-century Restoration Movement in America. Non-textual. This course is normally offered in the spring semester of odd numbered years.

## 3203 BIBLICAL EXEGESIS

Prerequisite: ENGL-1213.
A study of important tools and methodologies for better understanding of the Bible. Includes the basics of exegesis so students can do serious research. This course is normally offered in the fall semester.

## 3213 THE PENTATEUCH

An intensive study of the first five books of the Old Testament, with emphasis on key theological themes: creation, sin, God's promises to Abraham, liberation, and the purpose of the Law. This course is normally offered in the fall semester.

## 3222 RELIGIOUS EDUCATION OF CHILDREN

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to children from birth to age 12. Same as YTMN-3222. This course is normally offered every semester.

## 3223 GALATIANS, I AND II THESSALONIANS

A thorough analysis of three important Pauline epistles. Special attention is given to the relation of Christianity to the Law of Moses and to the second coming of Christ. This course is normally offered in the spring semester.

## 3233 I AND II TIMOTHY, TITUS

A thorough study of the epistles of Paul to Timothy and Titus with special emphasis on the historical occasion that prompted these letters. Among the issues covered are the qualifications of church leaders, social-ethical obligations of Christians, and roles in public assemblies. This course is normally offered in the spring semester.

## 3243 OLD TESTAMENT PROPHETS: 7TH TO 5TH CENTURY

An introduction to Israel's prophets who lived during the seventh, sixth and fifth centuries. Emphasis will be given to the historical setting and message of each prophet, with special attention to the relevance of these messages for today. This course is normally offered in the fall semester of odd numbered years.

## 3253 TEACHING THE BIBLE

A course designed to help students prepare Bible lessons that are a good development of a text or a Bible topic and to present it in a way that will illuminate the teaching of scripture. Courses in religious education of children, adolescents, and adults will build on the foundation laid in this course. This course is normally offered in the fall semester of even numbered years.

## 3313 JAMES TO JUDE

Designed to acquaint the student with the specific content and principles for Christian living found in the General Epistles of the New Testament. This course is normally offered in the fall semester.

## 3333 CROSS-CULTURAL MINISTRY

A course that examines spiritual, theological, and missiological issues involved in
ministering to individuals and groups in intercultural contexts, both foreign and domestic. Non-textual. Same as MISS-3313. This course is normally offered in the spring semester of odd-numbered years.

## 3403 LEADERSHIP AND ADMINISTRATION OF CHILDREN'S MINISTRY

The purpose of this course is to explore and examine ways in which the disability community provides the church with a dynamic model of spiritual transformation. The serious student will take away from this course a deeper understanding of the disability community and the church's obligation to reach out to those who are most vulnerable. This course will benefit those who are majoring in biblical studies, education, counseling, human services, business, any health-related field, or intercultural studies. Same as CMIN-3403.

## 3413 CHRISTIAN FAMILY

Prerequisite: Junior or Senior standing
A study of marriage, with emphasis on the characteristics of a Christian family. Special attention is given to communication, financial management, conflict resolution, sexuality, and biblical teaching on marriage. Non-textual. This course is normally offered every semester.

## 3422 MARRIAGE DEVELOPMENT

A laboratory class designed to assist first-year married couples in diagnosing and intervening in the areas of their marriage that most need strengthening. Because a spiritual foundation is essential to any successful marriage, special attention is given to that area. For married couples only. Non-textual. This course is normally offered in the fall semester.

## 3423 ARCHAEOLOGY AND THE NEW TESTAMENT

A study of the archaeological findings and site locations that are related to New Testament history and interpretation. Textual or Non-textual. This course is normally offered in the spring semester.

## 3433 ARCHAEOLOGY AND THE OLD TESTAMENT

A study of site locations and archaeological locations in Bible lands for greater understanding of the Old Testament. Textual or Non-textual. This course is normally offered in the fall semester.

## 3443 BIBLE AS LITERATURE

In this course students will exam the Bible not only as God's inspired word, but also as a literary text. Critiques and analyses from biblical scholars and scholars of literature will be explored. In addition, students will write about biblical texts paying attention to the literary details in these texts. Same as ENGL-3443. This course is normally offered in the spring semester.

## 3453 PERSONAL AND FAMILY FINANCE

This course is designed to help individuals and families learn the basics of managing their finances in a biblical way. Topics covered in this class include: budgeting, investing, insurance, buying your own home, and teaching your children about money. Same as FMST-3453. This course is normally offered every semester.

## 3512 PRISON EPISTLES

A study of the historical background and the contents of Ephesians, Philippians, Colossians, and Philemon. Emphasis is given to each epistle's outstanding teachings and practical value. This course is normally offered in the fall semester of odd numbered years.

## 3612 SPIRITUAL DEVELOPMENT OF CHILDREN

A study of the spiritual development of children as it applies to both churches and parents. Study will focus on how Scripture, tradition, reason, and experience are connected in shaping a child's spiritual development. Through reading, interviewing, and assignments students will learn first-hand how to better equip churches and parents to fulfill this role. This course is normally offered in the fall semester of even numbered years.

## 3613 JOB TO SONG OF SOLOMON

An introduction to the wisdom and devotional literature of ancient Israel. This course considers the practical lessons of Proverbs, the problem of suffering in the book of Job, the meaning of life in Ecclesiastes, and the language of praise and faith in the book of Psalms. Special attention is given to the relevance of this literature for contemporary life and faith. This course is normally offered in the spring semester.

## 3673 NEW RELIGIOUS MOVEMENTS

A study of explicitly religious teachings and practices in a wide variety of new religious movements, as well as quasi-religious teachings and practices in such areas as alternative medicine, the environment, self-help and psychotherapy, and the New Age movement. Fulfills the core curriculum non-Western civilization requirement. Same as MISS-3673. Non-textual. This course offered as needed.

## 3712 HEBREWS

A detailed study of this important New Testament epistle with emphasis on the supremacy of Christ, the old covenant and the new covenant, the danger of apostasy, and the mighty deeds of the faithful. This course normally offered in the spring semester of odd numbered years.

## 3713 CONTEMPORARY ETHICS

This course includes a brief history of ethical theory in Western civilization and a survey of several modern secular ethical systems. These are contrasted with biblical principles and Christian systems during discussions of specific topics such as sexuality, marriage, divorce,
abortion, euthanasia, the relation of Christians to the state, wealth and poverty, war and peace, race relations, and social justice. Non-textual. Same as SOCI-3713. This course is normally offered in the fall semester of odd numbered years.

## 3823 COUNSELING FOR MINISTERS

Prerequisite: PSYC-1113
A study of both theoretical formulation and biblical principles to form the basis for supervised laboratory practice of counseling skills for ministers. Non-textual. This course is normally offered in the spring semester.

## 3913 HOMILETICS I: PREPARATION \& DELIVERY OF RELIGIOUS SPEECHES

Prerequisite: COMM-1213 or permission of instructor.
A study of the theory, practice, and evaluation of the preparation and delivery of sermons and religious speeches. Same as COMM-3913. Non-textual. This course is normally offered in the fall semester.

## 4113 THE LOCAL CHURCH AND MISSIONS

A study of the responsibility of the local church in world evangelism with suggestions concerning how to lead the local church to accept and carry out its missionary work. Nontextual. Same as MISS-4113. This course is normally offered in the spring semester of odd numbered years

## 4133 SYSTEMATIC THEOLOGY

A systematic study of the major topics of theology: anthropology, ethics, eschatology, ecclesiology, christology, soteriology, and theology proper (Doctrine of God). Special attention will be paid to doctrinal thinking in the Restoration Movement and to contemporary issues in churches of Christ. Majors only, except by special permission of the instructor. Non-textual. This course is normally offered in the spring semester of odd numbered years.

## 4213 TEACHING THE BIBLE TO ADOLESCENTS

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to adolescents 13-18 years old. This course is normally offered in the fall semester.

## 4232 LIFE AND WORK OF THE MINISTER

Prerequisite: Junior or Senior Standing.
A course to help ministers prepare to deal with the following topics: personal spiritual development, caring for one's family, care of members with special needs, making church worship more effective, training and equipping members in the church, making effective use of computers in the work of the church, and serving in smaller communities. Nontextual. This course is normally offered in the fall of even numbered years.

## 4242 TEACHING THE BIBLE TO ADULTS

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to adults. This course is normally offered in the fall semester of even numbered years.

## 4243 OLD TESTAMENT PROPHETS: 8TH CENTURY

A study of Judean and Israelite prophets who lived during the eighth century. Special attention will be given to the historical background and message of each prophet, as well as his contemporary relevance. This course is normally offered in the fall semester of even numbered years.

## 4303 MISSIONS IN THE CONTEMPORARY WORLD

A study of the impact of various issues upon mission work as it is actually being carried out today around the world, taught by a visiting missionary. Content varies according to the particular field experience of the instructor. Non-textual. Same as MISS-4303. This course is normally offered as needed.

## 4312 ISAIAH

A detailed study of the book of Isaiah with emphasis on his times, his message, and the topic of Messianic prophecy. This course is offered in the spring semester of even numbered years.

## 4313 JOSHUA THROUGH NEHEMIAH

An intensive study of the history of Israel from the formation of the nation through the return from Babylonian exile. Based on the historical books of the Old Testament. Textual. This course is normally offered in the spring semester.

## 4412 GREAT CHRISTIAN DOCTRINE

A systematic study of the biblical teachings regarding revelation, God, Christ, and the Holy Spirit. This course is normally offered in the fall semester of even numbered years.

## 4413 DANIEL-REVELATION

A study of the books of Daniel and Revelation as examples of apocalyptic literature from the Old and New Testaments. The content of these books is studied with emphasis on the proper approach to this particular type of biblical material. (Counts as either Old or New Testament textual study.) This course is normally offered in the spring semester of even numbered years.

4423 GOSPEL OF JOHN
A study of the life and teachings of Jesus from the viewpoint of the Fourth Gospel.

Comparison is made with the Synoptics in appropriate places. Particular emphasis is given to the historical setting at the time the Gospel was written and John's Christology. Textual. This course is normally offered in the fall semester of even numbered years.

## 4513 HISTORY OF THE BIBLE

A study of the formation of the canon, inspiration, transmission, and translation of the books of the Bible. The course is designed to provide a knowledge of and appreciation for the varied history of the English Bible. Non-textual. This course is normally offered in the spring semester of even numbered years.

## 4523 SENIOR BIBLE CAPSTONE: CHRIST AND HIS WORLD

Christ and His World: Senior Bible Capstone will serve as the capstone for the core Bible classes at Oklahoma Christian by exploring the Christian worldview in relation to other views that students will encounter. It will be a small, discussion-oriented course aimed at helping students understand Christian ways of thinking and acting. While the intent is not for this to be an exhaustive survey, students will explore philosophical, religious, and ethical ideas from Christian and non-Christian sources as an aid to understanding how Christians can think and act consistently in the world, especially in relation to those who are from different belief-systems or backgrounds.

## 4613 ROMANS

A thorough exegesis of the epistle to the church in Rome with attention to the great doctrines of Christianity emphasized by Paul in this book. Textual. This course is normally offered in the fall semester of odd numbered years.

## 4622 PSALMS

An intensive study of the Book of Psalms for non-Bible majors. Primary objectives include providing the student with a working knowledge of the contents of the book, a fundamental grasp of critical issues in the interpretation of Psalms, and a good understanding of the significance of the Psalms for Christian life and the church. Textual. This course is normally offered in the spring semester of even numbered years.

## 4713 RESTORATION MOVEMENT

A study of the Scottish origins and American development of the Restoration Movement to the present day. Significant personalities and issues as well as the history and spread of the movement are studied. Same as HIST-3193. Non-textual. This course is normally offered in the fall semester of odd numbered years.

## 4732 NEW TESTAMENT BACKGROUNDS

An examination of the history, literature, and religious thought of what is known as Second Temple Judaism (586BC-70AD). Special attention will be given to the major themes of the classical Hebrew period, the crisis of Babylonian conquests, Hellenism, and Jewish attempts to reconstruct a religious identity in this period. This course is normally offered in the fall semester of even numbered years.

## 4753 SEMINAR IN CHRISTIAN MINISTRY

Prerequisite: Senior Standing.
A seminar in such matters as the relationship between ministers and elders, personal and practical problems a minister may face, applying for a job, planning the work of ministries, use of the minister's time, and church leadership. Non-textual. This course is normally offered in the spring semester.

## 4763 HOMILETICS II: ADVANCED HOMILETICS

Prerequisite: BIBL-3913 or COMM-3913
This course is a study of the writing and presentation of sermons, with an emphasis on homiletic form and effective public communication. The course also emphasizes analysis of sermons and preparation of a major sermon to be delivered before the Bible faculty. This course is normally offered every other spring in odd numbered years. Same as COMM4773. Non-textual.

## 4773 HOMILETICS III: PREACHING FROM A BIBLE BOOK

Prerequisite: BIBL-3913 or COMM-3913.
This course builds on the basic homiletics course and emphasizes preaching from a specific book of the Bible. Different books from the Old Testament or the New Testament may be chosen by the teacher. The course deals with analyzing the needs of a congregation, developing specific sermons of different types from the Bible book, and offering students an opportunity to present sermons for critique by other students and the teacher. This course is normally offered every other fall in even numbered years.

## 4803 MINISTRY PRACTICUM

On-site practical service in a local congregation by invitation and under the oversight of the elders and in conjunction with the local minister(s) and a faculty supervisor. The course includes readings, a journal, and a thorough evaluation. Non-textual. This course is normally offered every semester.

## 4822 PRACTICAL EXPERIENCE IN RELIGIOUS EDUCATION II

Practical experience in a church situation under the guidance of an experienced teacher or supervisor. By approval only. This course is normally offered every semester.

4830 NON-TEXTUAL SPECIAL STUDY
Content varies. Course may be repeated. (1-3 hours) This course is offered as needed.

4840 OLD TESTAMENT SPECIAL STUDY
Content varies. Course may be repeated. (1-3 hours) This course is offered as needed.
4850 NEW TESTAMENT SPECIAL STUDY
Content varies. Course may be repeated. (1-3 hours) This course is offered as needed.

## 4860 CROSS-CULTURAL EVANGELISM

Normally taken by students in an exchange program with Ibaraki Christian College in Japan. (2-4 hours) This course Is offered as needed.

## 4863 MINISTRY PRACTICUM

Practical experience in preaching under the guidance of an experienced supervisor. By approval only. This course is normally offered every semester.

## 4890 STUDIES OF RELIGIONS OF OTHER LANDS

Content will vary. By approval only. (1-3 hours) This course is offered as needed.

## 4900 INDEPENDENT STUDY

Independent study in Old Testament, New Testament or non-textual. This course is offered as needed.

## BIOLOGY (BIOL)

## 1013 PRINCIPLES OF BIOLOGYI

A study of the basic unit of life: a cell, including cell structure, energy transfer, metabolic processes, reproduction, and genetics. Lecture - 3 hours; Laboratory - 1 hour per week. Not applicable for credit in a science major. This course is normally offered every semester.

## 1023 PRINCIPLES OF BIOLOGY II

A survey of organisms, emphasizing biological diversity and ecological relationships between organisms. Lecture - 2 hours; Laboratory/discussion sessions -2 hours. Not applicable for credit in a science major. This course is normally offered every spring semester.

## 1115 GENERAL BIOLOGY I: CELLULAR AND MOLECULAR SYSTEMS

Prerequisite: MATH ACT subscore of 23 or higher or completion of BIOL-1013 with a grade of "B" or better. Concurrent enrollment in CHEM-1115 OR a "C" or better in CHEM-1115 or equivalent course.
An introductory majors course designed to provide a thorough foundation in cellular and molecular biology by investigating biological, chemical, genetic, and evolutionary mechanisms. Students will learn fundamental laboratory skills and techniques to investigate topics covered during lecture. An understanding of these laboratory skills will be essential for success in future biology and chemistry courses. Lecture -3 hours; Laboratory - 3 hours. This course is normally offered in the fall semester.

## 1215 GENERAL BIOLOGY II: COMPARATIVE PHYSIOLOGY AND ECOLOGY

Prerequisite: BIOL-1115 with a "C" or better.
An introductory majors course designed to provide a thorough understanding of the diversity of life on earth, including an introduction to the major life forms and comparative plant and animal physiology and systems. Students will also gain understanding in ecosystems, population, and community ecology. Students will continue learning fundamental laboratory skills needed for success in future biology and chemistry courses. Lecture - 3 hours; Laboratory - 3 hours. This course in normally offered in the spring semester.

## 2022 MEDICAL TERMINOLOGY

This course is an introduction to medical terminology, designed to increase familiarity with medical terms. Activities will include a review of basic anatomy and physiology, learning root words, and learning to breakdown and analyze unknown medical words. There are no prerequisites for this course however a working knowledge of how to use personal computers, including knowledge of word-processing and Internet searching is necessary. This course will be online course will be offered in the spring semester or additional times as needed.

## 2033 NUTRITION

A study of basic principles of human nutrition applied to health and diseases of the individual, family, and community. Course topics include biochemical aspects of nutrients, nutrient needs throughout the life cycle, and medical nutrition therapy, and its role in different medical conditions. This course is normally offered every semester.

## 2244 HUMAN ANATOMY

Prerequisite: 5 hours biological science.
A study of human body at cell, tissue, and organ system levels. Course topics include cells, tissues, and anatomical structures of the major organ systems including integumentary, skeletal and muscular system, nervous system, cardiovascular system, digestive system, respiratory, urinary, and reproductive systems. Lab experience includes observation of histological slides, use of models, and fetal pig dissection. Lecture - 3 hours; Laboratory 3 hours. This course is normally offered in the fall semester.

## 2314 GENETICS

Prerequisite: BIOL-2913 and CHEM-3115 with a grade of "C" or better.
A study of the principles of heredity and variation with emphasis on Mendelian genetics, genetic aberrations, molecular genetics, and current genetics research. Lab experiences
reinforce concepts of heredity through genetic mating, statistical analysis of data and methods of DNA isolation, manipulation, and analysis. Lecture - 3 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 2523 ANATOMY AND PHYSIOLOGY I

Prerequisite: BIOL-1013 with a " B " or better
This course is part one of a two-part comprehensive study of human anatomy and physiology at the cell, tissue, and organ system levels. Course topics include cells, cellular metabolism, and tissues, as well as the structure and function of the integumentary system, skeletal system, muscular system, and nervous system. The course includes an integrated lab which includes hands-on experimentation and animal dissections. Lecture/Laboratory 3 hours. This course is normally offered in the fall semester

## 2623 ANATOMY AND PHYSIOLOGY II

Prerequisite: BIOL-2523 with a grade of "C" or better.
This course is part two of a two-part comprehensive study of human anatomy and physiology at the cell, tissue, and organ system levels. Course topics include blood components, as well as the structure and function of the cardiovascular system, lymphatic system, digestive system, respiratory system, urinary system, and reproductive system. The course includes an integrated lab which includes hands-on experimentation and animal dissections. Lecture/Laboratory - 3 hours. This course is normally offered in the spring semester.

## 2624 PRINCIPLES OF MICROBIOLOGY

Prerequisites: $\mathrm{BIOL}-1013$ with a grade of " B " or better and CHEM-1104.
A study of the microbes, parasites, and infectious elements (e.g., viruses, prions), including the fundamentals of chemistry as applied to metabolism, cell structure, and activity of antimicrobial agents. The student will gain a thorough understanding of the practical implications of public health microbiology, including microbial control in sanitation, epidemiology, and a thorough knowledge of host defenses, including details of the immune system function, virulence, immunology, and histopathology. The course will also cover a practical application of microbiology in medical testing, vaccination, and treatment of disease. Lecture - 3 hours; Laboratory - 2 hours. This course is normally offered in the spring semester.

## 2913 BIOSTATISTICS

Prerequisites: MATH-1213.
A 14-week, introductory course in applied statistics for the biological sciences. The course will focus on generation of hypotheses, experimental design, and analysis of experimental data. Students will determine proper sample size, categorization of experimental groups, and statistical tests to test hypotheses. Additionally, students will become proficient in the use of commonly used statistics software. This course is normally offered every semester.

## 3115 HUMAN ANATOMY WITH CADAVER DISSECTION

Prerequisites: Biology or Cellular and Molecular Biology majors must first complete their major's Biology core plus either BIOL-2244 or BIOL-3224 with a "B" or better. Instructor permission required.
A study of the gross anatomy of the body. Emphasis is given to the skeletal, muscular, nervous, cardiovascular, respiratory, digestive, renal, and reproductive systems. Lab experience includes dissection of the major regions of a human cadaver. Lecture - 3 hours; Laboratory - 6 hours. This course is normally offered in the fall semester.

## 3214 ENVIRONMENTAL HEALTH

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA.
An introductory course in environmental health encompassing a comprehensive survey of major environmental issues related to personal and community health, including population dynamics, environmental toxins, and environmental degradation. Integrated lecture/ Laboratory - 4 hours. This course is normally offered as needed.

## 3223 GENERAL EMBRYOLOGY

Pre-requisites: BIOL-2244 or BIOL-3115 with a grade of "C" or better
A study of processes required for normal human development, including fertilization and implantation, gastrulation, neurulation, and development of the major body systems. Additionally, students will discuss the pathologies associated with failure of these normal developmental processes. Lecture - 3 hours.

## 3224 HUMAN PHYSIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA . BIOL-1215 with a grade of " C " or better.
A study of the human organism. Emphasis is given to the normal function, regulatory mechanisms, and coordination of the neuromuscular, cardiovascular, excretory, digestive, respiratory, endocrine, and reproductive systems. Lab experience includes use of the physiograph to demonstrate ECG and EMG, blood counting and identification, spirometry, and sensory mapping. Lecture - 3 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 3233 EXERCISE PHYSIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA and BIOL-3244 with a grade of "C" or better. A study of the principles of exercise physiology. The response, adaptation, and regulation of the human body during exercise will be examined, from the cellular to the systemic level. Applications to physical training, health, performance and assessment will be emphasized.

This course is normally offered spring semester of odd numbered years.

## 3324 GENERAL ECOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA.
General principles of biotic and abiotic interrelationships, including conservation biology.
Field work emphasizes local ecosystems and pollution factors. Lecture - 3 hours;
Laboratory - 3 hours. This course is normally offered as needed.

## 3415 GENERAL MICROBIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA
A study of the structure and function of viruses, rickettsiae, bacteria, fungi, protozoans,
flatworms, and roundworms. Special emphasis is given to the isolation, culturing, staining, control, and pathogenesis of the organisms. The genetics, host parasite relations, and the immune response are also stressed. Lecture - 3 hours; Laboratory - 4 hours. This course is normally offered in the fall semester.

## 3432 PATHOGENIC MICROBIOLOGY LAB

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA . BIOL-3415 with a grade of "C" or better.
Lab studies involve culture, identification, and control of microorganisms. Also included are the basic immunological concepts and serologic techniques. This course is normally offered in the spring semester.

## 3433 PATHOGENIC MICROBIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA . BIOL-3415 with a grade of " C " or better.
A study of pathogenic microorganisms and the diseases they produce in humans. Emphasis is on the physiology, pathogenesis, and epidemiology of specific microorganisms, including host responses. This course is normally offered in the spring semester.

## 4014 BIOCHEMISTRY I WITH LAB

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA. BIOL-1115 and CHEM-3115 with a grade of " C " or better.
A detailed study of the structure and function of the major classes of biomolecules including proteins, lipids, carbohydrates, and nucleic acids. The course also includes in-depth discussions of enzyme mechanisms and catalysis, receptor/ligand interaction, cellular signaling pathways, molecular motors, and membrane structure and function. The lab provides basic biochemical techniques, including differential centrifugation, chromatography, oxidation studies, enzymology, and electrophoresis. Lecture - 3 hours; Laboratory - 3 hours. Same as CHEM-4014 This course is normally offered in the fall semester.

## 4123 BIOCHEMISTRY II

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA. BIOL-4014 or CHEM-4014.
A detailed overview of intermediary metabolism, including discussion of glycolysis, Krebs cycle, oxidative phosphorylation, amino acid synthesis and catabolism, the urea cycle, and nucleotide biosynthesis. Lecture -3 hours. Same as CHEM-4123. This course is normally offered in the spring semester of odd numbered years.

## 4201 IMMUNOLOGY LAB

An introduction to experimental design and basic techniques commonly used in immunology research laboratories. Cellular immunology techniques include preparation of cell suspensions, detection of activated T cells, production of monoclonal antibodies, and the following assays: enzyme-linked immunosorbent assay (ELISA), SDS-PAGE, western blot, and flow cytometry. This course is not suitable for students who object to the use of animals in teaching and/or research. This course is normally offered in the fall semester.

## 4213 IMMUNOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA . BIOL-2314 with a grade of " C " or better.
A study of advanced principles of immunology. The nature of the immune response mechanisms, immunogenetics, diseases of the immune system, and applications of immunology in medicine and research are emphasized. Lecture - 3 hours. This course is normally offered in the fall semester.

## 4223 MOLECULAR BIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA. BIOL-2314 and CHEM-3115 with a grade of " C " or better.
An advanced study of molecular biology and genetics with emphasis on the structure, function, and mechanisms of the molecules involved in replication, recombination, transcription, RNA processing, translation, and gene expression. Lecture - 3 hours. This course is normally offered in the spring semester of even numbered years.

## 4301 MOLECULAR BIOLOGY LAB

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA. BIOL-2314 and CHEM-3115 with a grade of " C " or better.
The student will use standard lab techniques to conduct a semester research project that
attempts to answer a pertinent question in the area of molecular genetics or cell biology Laboratory -3 - hours. This course is normally offered in the spring semester of even numbered years.

## 4313 FORENSIC TOXICOLOGY

Prerequisite: CHEM-3115 with a grade of " C " or better
An integrated study of toxicology as it relates to forensic science. This course will provide an introduction to postmortem forensic toxicology, forensic drug testing and pharmacokinetics and pharmacodynamics. Analytical principles and methodologies, both theory and applications, will be covered for the most commonly encountered analytes, such as ethyl alcohol, benzodiazepines, opiods, cocaine, cannibas, amphetamines, hallucinogines, therapeutic drugs, carbon mononoxide, and cyanide. This course is primarily about exploring the analysis of elicite drugs and chemicles in biological specimens taken from individuals who have died from their toxic effects. Lecture-3 hours. Same as CHEM-4313. This course is normally offered in the spring semester of odd numbered years

## 4323 ADVANCED CELLULAR BIOLOGY

Prerequisite: Biology or Cellular Molecular Biology majors must first complete their major's Biology Foundation with a 2.5 GPA.
This course is designed to provide an advanced cellular view of the plasma and internal membrane systems, mechanisms of cellular structure, adhesion and motility, as well as individual organelles. Students will learn how each cell system is coordinated together to perform specific cellular functions. Understanding these concepts will provide students a broad cellular foundation for further study of detailed biochemical reactions and molecular mechanisms that happen within these cellular systems. Lecture -3 hours. This course is normally offered in the spring semester of odd numbered years

## 4411 INTRODUCTION TO RESEARCH

Prerequisites: CHEM-3115 and 8 hours biological science. Junior standing required. An introduction to scientific research in one of several labs at or affiliated with OC. Students spend time in research labs observing current biological, chemical, biochemical, or biomedical research. Research techniques, methods and selected research papers from the labs visited are discussed at a monthly research seminar. This course is normally offered as needed.

## 4412 UNDERGRADUATE RESEARCH

Prerequisites: Junior or Senior standing required, BIOL-4411 and permission of the instructor.
A hands-on experience in research at one of several laboratories at or affiliated with OC. The research experience involves reading appropriate research papers, learning appropriate research methods and participating in appropriate seminars. Selection for undergraduate research is competitive and dependent on the number of student applicants, participating laboratories and funding. This course is normally offered in the spring semester of odd numbered years.

## 4414 UNDERGRADUATE RESEARCH

Prerequisites: BIOL-4411 and permission of the instructor. Junior standing required A full-time research experience lasting at least 8 weeks in a lab at or affiliated with OC or approved by the instructor. Research programs are competitive, and applications must be submitted by February 1. This course is normally offered in the summer.

## 4513 HISTORY AND PHILOSOPHY OF SCIENCE

Prerequisite: 16 hours biological science. Junior standing required.
A survey of the great philosophies of the Western tradition and their influence on the history of science. Specific application will be made to the ethical dilemmas of current science. Lecture -3 hours. This course is normally offered as needed.

## 4814 FIELD MEDICINE PRACTICUM

Prerequisites: Satisfactory standing in pre-medical studies and selection by the science faculty in cooperation with the International Studies Committee. Junior standing required. Practical experience in assisting a physician at a medical missions clinic as part of the student's enrollment in an international studies program. This course Is offered as needed

## 4900 INDEPENDENT STUDY IN BIOLOGY

Junior standing required.
Assigned research, readings and reports based on the needs of the individual student. May be taken only by junior or senior science majors with approval of the departmental chair. ( $1-3$ hours) This course is offered as needed.

## BUSINESS ADMINISTRATION (BUSA)

## 1111 BUSINESS ORIENTATION

An orientation to the theory and practice of business. Students will also engage in a real world team project where in they work with student and faculy consultants to development a new business concept and present the concept to a panel of potential investors. This class is normally offered in the fall semester for incoming freshman and transfer business majors.

## 1211 INTRODUCTION TO BUSINESS

An introductory business course designed to acquaint the student in a general way with business terminology, concepts, and functions. The course will include broad treatment of business objectives and strategies. Students are introduced to the School of Business

Administration and to the skills required to succeed in the field of business. This course is normally offered every semester.

## 2003 CAREER AND PROFESSIONAL READINESS

This course delves deeply into the theme of professional development as you prepare to enter into internships and other experiential oppoprtunities and to meet the demands of acquiring and building a career. The course in comprised of three modules, each with a major assignement and developmental excersizes: leadership (ethics, communication, leadership styles), self management (emotional intelligence, personal branding, etiquette), and professional development (portfolio/resume building, networking, interviewing). This course is normally offered every spring semester.

## 3213 BUSINESS LAW

A survey of the Anglo-American system of jurisprudence as the legal background for the operation of the free enterprise system in our society. The course considers the historical, ethical, social, and practical perspectives. It also examines the basic rules of law pertaining to contracts, property, sales, negotiable instruments, secured transactions, agency, employment, partnerships, corporations, insurance, bankruptcy, and wills. This course is offered in the fall semester.

## 3713 BUSINESS ETHICS

This course examines basic ethical issues involved in the conduct of business from a Biblical perspective. Critical thinking regarding organizations as spiritual, social, moral, and ethical entities is explored. Topics include personal responsibility, corporate social responsibility, and the effects of diversity and culture on ethical considerations. This course is normally offered every semester.

## 4900 INDEPENDENT STUDY IN BUSINESS ADMINISTRATION

Assigned readings, reports, and research projects based on the needs of the student. (1-3 hours). A maximum of 3 hours may be counted toward major. This course is offered as needed.

## CHEMISTRY (CHEM)

## 1104 INTRODUCTION TO CHEMISTRY

Prerequisite: SDEV-0103 or higher math course with grade of "C" or better
A survey course covering atomic structure, bonding, application of mathematics to chemical equations, solutions, acid-base chemistry, equilibrium, and introductory organic and biological chemistry. The lab includes experiments in these lecture topics emphasizing measurement concepts and calculations. In addition to pre-nursing and pre-science, this course can be taken for science core credit. Lecture - 3 hours; Laboratory - 3 hours. This course is normally offered in the fall and spring semesters.

## 1115 GENERAL CHEMISTRY I

Prerequisite: ACT math subscore of 23 or greater, or CHEM-1104 with a grade of "C" or better; and MATH-1213 with a grade of "C" or better (or equivalent or higher level math) or co-req of MATH-1213. Underprepared students are recommended to take SDEV-0133. First semester of a two-semester sequence for science majors. A study of atomic theory, bonding, periodicity, thermochemistry, gas laws, and, in general, quantitative relationships in chemical and physical processes. Lecture -4 hours; Laboratory -3 hours. This course is normally offered in the fall and spring semesters.

## 1215 GENERAL CHEMISTRY II

Prerequisite: CHEM-11ith a grade of "C" or better, and MATH-1213 with a grade of "C" or better (or equivalent or higher level math).
Second semester of a two-semester sequence for science majors. A study of the liquid and solid states, solubility and acid-base equilibria, thermodynamics, kinetics, oxidationreduction, electrochemical cells, and complex ions. Also includes an introductory unit on organic chemistry. Lecture -4 hours; Laboratory - 3 hours. This course is normally offered in the spring semester and summer.

## 1313 CHEMISTRY FOR ENGINEERS

Prerequisite: ACT math sub-score of 24 or greater, or credit for high school chemistry, or CHEM-1104 with a grade of " $C$ " or better, or SDEV-0103 with a grade of "C" or better and MATH-1213 with a grade of "C" or better (or equivalent or higher math) or co-requisite of MATH-1213.
A study of stoichiometry, periodicity, electronic structure of the atom, bonding theories, the states of matter, thermochemistry, and chemical thermodynamics and selected applications for engineering
Lecture -3 hours. This course is normally offered in the spring semester.

## 2113 INTRODUCTION TO FORENSIC SCIENCE

A survey course covering the various ways in which science is applied to criminal and civil law. The major fields of forensic science and their basic tenets will be discussed and supported. Topics of forensic science to be discussed include crime scene processing and evidence collection, soil, hair, glass, and trace evidence, fingerprints, documents, firearms and gunshot residue, arson investigation, drug abuse, toxicology, serology and DNA, and explosives. In addition to forensic science, this course can be taken for science core credit Lecture -3 hours. This course is normally offered in the fall of odd numbered years.

## 3115 ORGANIC CHEMISTRY I

Prerequisite: CHEM-1215 with a grade of " C " or better.
An integrated study of atomic and molecular orbital theory with the naming of organic
compounds, including an introduction to stereochemistry. A study of structure and reactivity of various types of organic compounds, including alkenes, alkynes, dienes, alkanes, alkyl halides, alcohols, amines, ethers, radicals, and epoxides. Principles of mass spectroscopy, infrared spectroscopy, and ultraviolet/visible spectroscopy. Lab exercises include Introduction to lab techniques used in organic analysis, identification, and synthesis, including Fourier transform infrared spectroscopy. Techniques for determining physical properties, such as melting point, boiling point, and refractive index, as well as performing extraction, recrystallization, sublimation, and distillation. Use of the lab notebook and preparation of a detailed lab report. Lecture -4 hours; Laboratory -3 hours. This course is normally offered in the fall semester.

## 3114 ANALYTICAL CHEMISTRY I

Prerequisite: CHEM-3124 with minimum grade of " $C$ " or better
A course for increasing the understanding of the chemical composition of matter, and the tools and techniques used to make qualitative and quantitative analyses. The student will learn to apply scientific measurement principles in order to understand chemical systems and collect useful information. The student will experience analysis with several techniques and instruments found in the analytical laboratory. Lecture-3 hours; Laboratory-3 hours. This course is normally offered in the fall semester of even numbered years.

## 3124 ORGANIC CHEMISTRY II

Prerequisite: CHEM-3115 with a grade of " $C$ " or better.
Continuation of the first semester course with emphasis on the study of organic chemical reactions, including the reactions of benzene, the reactions of substituted benzenes, and the structure and reactions of carbonyl compounds that include aldehydes, ketones, and carboxylic acid derivatives. Coverage of oxidation-reduction reactions, heterocyclic compounds, and multi-step synthesis processes. Principles of NMR spectroscopy. Lab exercises include using techniques from first semester lab course plus gas chromatography and NMR to perform and evaluate the following chemical reactions: catalytic hydrogenation of alkenes, hydration of alkenes, synthesis of alcohols, use of nucleophilic substitution to synthesize 1-bromobutane, Grignard synthesis, aromatic substitutions, the Friedel-Crafts acylation reaction, and pinacol rearrangements. Lecture -3 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 3214 ANALYTICAL CHEMISTRY II

Prerequisite: CHEM-3114 with a grade of "C" or better.
A course for increasing the knowledge of gathering qualitative and quantitative information about the composition and structure of matter. This course is to help the student gain an understanding of the tools available for solving analytical problems. The pitfalls that accompany physical measurements and the limitations in sensitivity, precision, and accuracy of instrumental measurement will be discussed. The strengths and limitations of instruments that are currently available in modern industrial and research laboratories, such as the gas chromatograph/mass spectrometer, high performance liquid chromatograph, atomic absorption spectroscope, ultraviolet/visible light spectrophotometer, and Fourier transform infrared spectroscope will be covered in detail. Lecture- 3 hours; Laboratory- 3 hours. This course is normally offered in the spring semester of odd numbered years.

## 4014 BIOCHEMISTRY I AND LAB

Prerequisite: CHEM-3115 with a grade of "C" or better, Chemistry major. A detailed study of the structure and function of the major classes of biomolecules, including proteins, lipids, carbohydrates, and nucleic acids. The course also includes in-depth discussions of enzyme mechanisms and catalysis, receptor/ligand interaction, cellular signaling pathways, molecular motors, and membrane structure and function. The lab provides basic biochemical techniques, including differential centrifugation, chromatography, oxidation studies, enzymology, and electrophoresis. Lecture - 3 hours; Laboratory - 3 hours. Same as BIOL-4014. This course is normally offered in the fall semester.

## 4113 PHYSICAL CHEMISTRYI

Prerequisites: CHEM-3124 and MATH-2114 with a grade of " $C$ " or better.
Corequisite: CHEM-4121.
A study of the mathematical approaches to the physical properties of chemical systems, including gas laws, thermodynamics equilibria, liquids and solutions, solids, and reaction rates. Lecture -3 hours. This course is normally offered in the fall semester of odd numbered years.

## 4121 PHYSICAL CHEMISTRY EXPERIMENTS

Corequisite: CHEM-4113.
Lab exercises to accompany CHEM-4113, which is a corequisite. Laboratory - 3 hours.
This course is normally offered in the fall semester of odd numbered years.

## 4123 BIOCHEMISTRY II

Prerequisite: CHEM-4014 with a grade of "C" or better.
A detailed overview of intermediary metabolism including discussion of glycolysis, Krebs cycle, oxidative phosphorylation, amino acid synthesis and catabolism, the urea cycle and nucleotide biosynthesis. Lecture - 3 hours. Same as BIOL-4123. This course is normally offered in the spring semester of odd numbered years.

## 4213 PHYSICAL CHEMISTRY II

Prerequisite: CHEM-4113 with a grade of "C" or better.
Corequisite: CHEM-4221.
A study of quantum mechanical investigations into chemical systems, concentrating on the fundamental nature of atoms, molecules and bonding. These principles are used to
discuss the interaction of atoms and molecules with radiation and the statistical behaviors of ensembles. Lecture - 3 hours. This course is normally offered in the spring semester of even numbered years.

## 4221 PHYSICAL CHEMISTRY EXPERIMENTS II

Prerequisite: CHEM-4121 with a grade of " C " or better.
Corequisite: CHEM-4213.
A continuation of CHEM-4121. Laboratory - 3 hours. This course is normally offered in the spring semester of even numbered years.

## 4313 FORENSIC TOXICOLOGY

Prerequisite: CHEM-3115 with a grade of "C" or better.
An integrated study of toxicology as it relates to forensic science. This course will provide an introduction to postmortem forensic toxicology, forensic drug testing and pharmacokinetics and pharmacodynamics. Analytical principles and methodologies, both theory and applications, will be covered for the most commonly encountered analytes, such as ethyl alcohol, benzodiazepines, opioids, cocaine, cannibas, amphetamines, hallucinogens, therapeutic drugs, carbon mononoxide, and cyanide. This course is primarily about exploring the analysis of elicit drugs and chemicals in biological specimens taken from individuals who have died from their toxic effects. Lecture-3 hours. Same as BIOL-4313. Lecture-3 hours. This course is normally offered in the spring semester of odd numbered years.

## 4414 INORGANIC CHEMISTRY

Prerequisites: CHEM-3124 with a grade of "C" or better.
A study of inorganic chemistry that includes advanced atomic theory, symmetry and group theory, molecular orbital theory, advanced acid-base theory, coordination chemistry, spectroscopy, and introduction to solid state, main group, organometallic, bioinorganic, and environmental chemistries. Lecture - 3 hours, Laboratory -3 hours. This course is normally offered in the fall semester of even numbered years.

## 4514 FORENSIC ANALYSIS

Prerequisite: CHEM-2113 and CHEM-3115 with a grade of "C" or better.
An integrated laboratory/lecture study of various up-to-date technologies utilized by forensic scientists in their application of science to criminal investigations. The laboratory will include many prominent analyses, including blood alcohol, drugs of abuse, ink, fingerprint, glass fragmentation, and explosives. Lecture -3 hours; laboratory -3 hours. This course is normally offered in the spring semester of even numbered years.

## 4611, 4612, 4613 RESEARCH METHODS

Prerequisite: permission of instructor.
A lab-literature approach to advanced topics and methods in chemistry. Work will involve lab experiences beyond those available in other courses, with methods development for undergraduate research projects. (1-3 hours) This course is offered as needed.

## 4713 PRACTICUM IN FORENSIC SCIENCE

Prerequisite: CHEM-2113 and CHEM-3115 with grade of "C" or better and recommendation of the chemistry faculty.
A hands-on experience in forensic science research in the chemistry laboratories at OC, in the forensic laboratory of the Oklahoma State Bureau of Investigation (OSBI) Forensic Science Center (FSC), or at another suitable forensic science lab. The student will rotate through all units of the FSC or be assigned a specific unit working on a designated research project or perform a research project at OC. Laboratory-3-8 hours. This course is normally offered in the fall and spring semesters and in the summer.

## 4900 INDEPENDENT STUDY IN CHEMISTRY

Assigned readings, reports, or lab investigations based on the needs and interests of the individual student. Must be administered by a chemistry professor and may be taken only with the approval of both the departmental chair and the instructor directing the study. (1-3 hours) This course is offered as needed.

## 4901 INDEPENDENT STUDY IN CHEMICAL HEALTH AND SAFETY

Prerequisites: CHEM-3115 with a grade of "C" or better and permission of instructor. Reviewing technical sources of information, understanding the human health and safety of a chemical compound commonly found in the workplace or in the environment. Organizing the information and co-writing with the instructor an informational article for publication in an American Chemical Society peer-reviewed journal. 1 hour. This course is normally offered every semester.

## CHILD/HUMAN DEVELOPMENT (CHDV)

## 3013 NATURE AND CHARACTERISTICS OF EARLY CHILDHOOD

Prerequisite: FMST-1113. Corequisite or prerequisite: PSYC-3523.
After studying the broad field of Early Childhood in relation to its multiple historical, philosophical and social foundations, the candidate will examine how these foundations influence current thought and practice. After exploring the characteristics of the young child from birth to age eight, the candidate will demonstrate observation techniques and planning skills related to developmentally appropriate practice. The candidate will also reflect on the role of the teacher and ethical considerations of the Early Childhood field. (Cross listed with ECED-3013 but will not apply to teacher licensure requirements.) This course is normally offered in the fall semester.

## 3023 EMERGENT LITERACY

Prerequisites: FMST-1113, CHDV-3013 and PSYC-3523.
This course is a study of the emerging process of language development from infancy through the primary years. The candidate will observe and document a child's development through all four age categories, infant, toddler, preschooler, and primary-aged (eight practicum hours). The candidate will demonstrate understanding of and respect for the socio-cultural diversity of literacy development as well as the interrelationships of culture, language, thought, and the function of the home language. Additionally, the candidate will study children's literature to develop an understanding that literature forms a central focus for language and literacy development. The candidate will apply various methods of using literature with children in the home and classroom settings including reading aloud to a child once per week for 14 weeks (eight practicum hours). (Students whose programs do not require admission to teacher education but require this course will receive credit for CHDV-3023 which cannot be applied to licensure requirements.) Same as ECED-3023 and ELEM-3023. This course is normally offered in the fall semester.

## 4023 TOPICS IN EARLY CHILDHOOD

Prerequisite: FMST-1113, CHDV-3013 and PSYC-3523.
This is a study of family, family within the community, child behavior, and classroom guidance theories for the preschool and primary age child. The course also includes aspects of health, safety, and nutrition within the contexts of home, child care, and school. Cross listed with ECED-4023 but will not apply to teacher licensure requirements. This course is normally offered in the in the spring semester.

## CHILDREN'S MINISTRY (CMIN)

## 1202 INTRODUCTION TO CHILDREN'S MINISTRY

A study of the history of the child in the Bible and the unique aspects of the profession of Children's Ministry. This course is normally offered in the spring semester. Same as BIBL-1202.

## 2122 TEACHING THE BIBLE TO PRESCHOOLERS

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to children from birth through age five. This course is normally offered in the fall semester. Same as BIBL-2122.

## 2222 TEACHING THE BIBLE TO ELEMENTARY CHILDREN

A study of the age characteristics, motivational principles, learning methods, and curriculum for teaching the Bible to children in Grades 1-6. This course is normally offered in the fall and spring semesters.

## 3013 MINISTRY TO EXCEPTIONAL CHILDREN, YOUTH, ADULTS, AND THEIR

 FAMILIESThe purpose of this course is to explore and examine ways in which the disability community provides the church with a dynamic model of spiritual transformation. The serious student will take away from this course a deeper understanding of the disability community and the church's obligation to reach out to those who are most vulnerable. This course will benefit those who are majoring in biblical studies, education, counseling, human services, business, any health-related field, or intercultural studies.

## 3212 CURRICULUM DEVELOPMENT FOR CHILDREN'S MINISTRY

This course is designed to equip university students with the skills to develop curriculum for children's ministry and be able to utilize the resources available. This course is normally offered in the spring semester of even numbered years.

## 3403 LEADERSHIP AND ADMINISTRATION OF CHILDREN'S MINISTRY

A study of the various and unique aspects of leadership and administration necessary to be an effective Children's Minister. This course is normally offered in the fall semester of even numbered years. Same as BIBL-3403.

## 3612 SPIRITUAL DEVELOPMENT OF CHILDREN

A study of the spiritual formation of children as it applies to both churches and parents. Study will focus on how Scripture, tradition, reason, and experience are connected in shaping a child's spiritual formation. Through reading, conducting surveys, and assignments, students will learn first-hand how to better equip churches, parents, and teachers to fulfill this role. This course is normally offered in the fall semester of even numbered years.

4313 VOLUNTEERS, PARENTS, AND STAFF IN YOUTH AND FAMILY MINISTRY
This course will equip students to carry out Ephesians 4:11-13. Effective youth and family ministry requires help. Students will learn how to recruit and train volunteers. Equipping parents to do their God-given job (Deuteronomy 6:4-9) will be given priority in the course. Relationships with paid and volunteer staff will be discussed. Students will be required to volunteer at a local church during the semester in the youth and family ministry. Same as YTMN-4313. This course is normally offered in the spring semester.

## 4412 VITAL ISSUES IN CHILDREN'S MINISTRY

A study of the various and unique aspects of leadership and administration necessary to be an effective Children's Minister. This course is normally offered in the spring semester of even numbered years.

## COMMUNICATION (COMM)

## 1111 INTRODUCTION TO COMMUNICATION

Prerequisite: Communication, interdisciplinary studies, and undeclared majors only. An overview of print and electronic mass media with illustrations of opportunities available in the area of communication. Students gain an overall understanding of the media before focusing on specific aspects of it in subsequent courses, and evaluate their interests and goals as they relate to mass media careers. This course is normally offered as needed.

## 1211 INTRODUCTION TO ELECTRONIC MEDIA

Prerequisite: Communication, interdisciplinary studies, and undeclared majors only. Designed to introduce the first-time student to electronic media and Eagle broadcasting. This course is normally offered in the fall semester.

## 1213 ORAL COMMUNICATION

Study and practice of communication behavior in a variety of situations, focusing on interpersonal and public communication. Media literacy for presentations will also be included. This course is normally offered every semester.

## 1311 COMMUNICATION PRACTICUM

Requires 60 hours in rehearsal and performance in a faculty-directed campus dramatic production, director approval only. This course is normally offered every semester.

## 1361 MEDIA PRACTICUM

Prerequisite: Interactive Media Majors only.
For those instructured on campus public relation experiences. To receive credit, a student must complete a project or projects requiring at least 60 hours. This course is normally offered in the summer.

## 1371 MEDIA PRACTICUM JOURNALISM

Prerequisite: COMM-1211.
For those instructured on campus journalism experiences whether broadcast, print, or web. The course includes implementation and development of broadcasting skills and techniques. To receive credit, a student must work at least 60 hours. This course is normally offered every semester.

## 2003 EFFECTIVE LEADERSHIP

This course examines the fundamental prinicples of leadership from a communication perspective, discussing how those principles are evident in politics, business, religious groups, and organizations. Emphasis is placed on differentiating effective from ineffective leadership. Same as LDSH-2003.

## 2023 HISTORY OF THEATER

This course will expose students to the development of Western and non western theatrical traditions through primary sources, class lectures, and critical dialogue. The course will trace the earliest records of theatrical staging to the rise of eighteenth-century national theaters in Europe. Special emphasis will be placed on technological innovations, dramatic conventions, and the role of politics and ritual in theatrical history. Composition and reading outside of class will be required. This course is normally offered every semester.

## 2113 WRITING FOR MEDIA

Prerequisite: ENGL-1113.
An introduction to writing skills, with attention to writing news, features, broadcast, public relations, and advertising. This course is normally offered every semester.

## 2213 VOICE AND ARTICULATION

Prerequisite: COMM-1213.
An application of phonetics to the improving of articulation, vocal patterns, and vocal performance. This course is normally offered in the spring semester of odd numbered years.

## 2313 ACTING FOR STAGE AND SCREEN

Acting for stage and screen is a course in acting fundamentals focusing on two broad areas: acting for the camera and the actor's approach to a role. This course is normally offered in the fall semester of even numbered years.

## 2413 PHOTOGRAPHIC PRINCIPLES AND PRACTICES

Prerequisite: Communication department major or permission of department. A course designed for students who need a working knowledge of photography in their chosen profession. Enrollment is limited to specific majors. The course will emphasize composition and content. No darkroom work is required. Digital cameras are allowed if the camera features manual overrides of automatic settings. This course is normally offered in the fall semester.

## 2513 COMMUNICATION THEORY

Special attention to various types of communication theory and research, including interpersonal, public, and mass communication. A unit on the history of communication study is included. This course is normally offered in the spring semester of even numbered years.

2613 MEDIA, FAITH, AND CULTURE
An introduction to the relationship between the mass media and the culture in which it operates. Major theories of how the media work are introduced. This intermediate course
helps prepare students for subsequent courses in news reporting, video and audio production, advertising, and public relations. This course is normally offered in the fal semester.

## 2643 MEDIA PRODUCTION

Prerequisite: COMM-2113 or COMM-2723.
An orientation to the equipment and technical skills involved in acquiring and editing audio and video in a digital, non-linear environment. Students will apply composition and editing theories to several productions during the term. This course is normally offered in the fall and summer semester.

## 2723 SCRIPTWRITING FOR TELEVISION AND MOVIES

## Prerequisite: ENGL-1113.

An examination and application of the successful patterns, traditions, and conventions of narrative scriptwriting for television and film while maintaining creative innovation. During the term each student will write a script for a defined audience. This course is normally offered in the fall semester.

## 2813 ADVERTISING PRINCIPLES

Prerequisite: COMM-1111 or COMM-2113.
Designed to introduce the student to the history of advertising and its role and function
today. The course focuses on current case studies about advertising today and analyzes an ad campaign. This course is normally offered in the spring semester of odd numbered years.

## 2823 PUBLIC RELATIONS PRINCIPLES

Prerequisite: COMM-1111 or COMM-2113.
Study of the function and procedures of public relations with attention to methods of gaining public support for an activity, cause, or movement. The course includes fundamentals of public relations copy for varied media and channels. This course is normally offered in the spring semester of even numbered years.

## 2833 REPORTING

Prerequisites: COMM-2113, COMM-2643, and ENGL-1213.
A project-based course designed to teach the basic skills of information gathering and processing for various means of distribution including print, broadcast, and web. Students will begin maintaining their own portfolio of work. This course is normally offered in the spring semester.

## 3003 FAMILY COMMUNICATION AND LEADERSHIP

This course examines theories and research pertaining to communication in the family context. Special emphasis is placed on communication and the development of leadership within the family. Same as FMST-3003.

## 3113 BUSINESS AND PROFESSIONAL COMMUNICATION

Prerequisites: COMM-1213 and ENGL-1213 and Junior standing.
Special attention is given to communication theories as they apply to a variety of business and professional settings, including conflict management, leadership, team management, and professional speaking situations. This course is normally offered every semester.

## 3123 ORAL INTERPRETATION

Prerequisite: COMM-1213 or permission of instructor.
Study and practice in the oral interpretation of literature. This course is normally offered as needed.

## 3143 BASICS OF VISUAL COMMUNICATION

Prerequisite: ARTS-1103.
Basics of Visual Communication is a general survey of graphic arts, emphasizing
techniques, processes, and procedures for putting words and illustrations in print and electronic media with particular attention to elements of effective design. Additionally, the course includes the principles of type use and the application of type in a rapidly-evolving world media, particularly electronic media and media groups where convergence is the practice of the day. This course is normally offered in the spring semester.

## 3213 DIRECTING FOR STAGE AND SCREEN

Fundamentals of the director's craft as applied to film and stage. This course is normally offered in the spring semester of odd numbered years.

## 3233 MANAGING SOCIAL MEDIA

Prerequisite: ENGL-1213, Junior standing.
In this course, we will explore communication practices, including emerging social media techonologies, and study their ethical application in the contemporary practice of public image and reputation management. We will examine these technologies from a theorectical perspective by reading research and writings from professionals and scholars. This course is normally offered in the fall semester of even numbered years.

## 3243 PLANNING, ORGANIZING, AND LEADING EVENTS

Prerequisite: ENGL-1213, Junior standing.
Planning, Organizing, and Leading Events introduces you to the many facets of managing an event - from communication and ticketing, to operations and evaluation. You'll learn the importance of planning, budgeting, and customer service. This course is normally offered in the fall semester odd numbered years.

## 3311 ADVANCED COMMUNICATION PRACTICUM

Prerequisite: COMM-1411 or instructor consent.
Requires 60 hours of backstage work in a faculty-approved campus theater production.
This course is normally offered every semester.

## 3323 ORGANIZATIONAL COMMUNICATION

Prerequisite: COMM-2513.
An examination of the functions of communication in the organizational setting,
with emphasis on the application of recent research and theories to the analysis of communication in organizations. This course is normally offered in the fall semester of even numbered years.

## 3333 TEAM COMMUNICATION AND LEADERSHIP

Prerequisite: COMM-1213.
A study of the communication patterns and dynamics of small groups. Special attention is given to organizing, participating in, and evaluating group discussions. This course is normally offered in the spring semester of odd numbered years.

## 3343 CAMPAIGNS

Prerequisite: Junior standing.
Designed for journalism and broadcasting students to teach the art of writing commercial copy for radio, television, and newspaper. This course complements courses in journalism and broadcasting which emphasize the writing of news. Students also develop an ad campaign. This course is normally offered in the fall semester.

## 3351 ADVANCED MEDIA PRACTICUM: JOURNALISM

Prerequisites: Junior or Senior standing and COMM-3361.
To receive credit, a student must work at least 60 hours. This course is normally offered every semester.

## 3353 INTERPERSONAL COMMUNICATION

An application of interpersonal communication theory and research to the study of developing relationships and family communication. Course topics include listening, nonverbal communication, conflict management, and gender differences in communication.
This course is normally offered in the spring semester.

3361 ADVANCED MEDIA PRACTICUM : PUBLIC RELATIONS
Prerequisite: Junior Standing and at least two terms of COMM-1361.
For those involved in structured public relations experiences. The course provides opportunity for application and development of public relations skills in a supervised environment. To receive credit, the student must work at least 60 hours and meet goals set by the student and professor at the beginning of the term. This course is normally offered every fall semester.

## 3371 ADVANCED MEDIA PRACTICUM

Prerequisites: Junior or Senior standing and COMM-1371.
Same as COMM-1371, but for juniors and seniors. To receive credit, a student must work at least 60 hours. This course is normally offered every semester.

## 3413 ARGUMENTATION AND DEBATE

Prerequisite: COMM-1213.
A study of the forms of logical thought with practical identification of these forms and areas such as politics, law, human relations, advertising, evidence, reasoning, and reputation will be covered. This course is normally offered as needed.

## 3453 ELECTRONIC NEWS WRITING

Prerequisite: COMM-2833 and prerequisite or corequisite: COMM-2643.
Supervised writing to meet the professional demands of organizing and presenting information for broadcast. This course is normally offered in the fall semester of even numbered years.

## 3543 PUBLIC RELATIONS CASE STUDIES

Prerequisite: COMM-2823 and ENGL-1213.
A study of public relations as currently practiced by corporations, institutions, and government. The course includes practical experience in the procedures of media relations and training. This course is normally offered fall semester of even numbered years.

## 3633 AUDIO FOR MEDIA

Prerequisite: COMM-1211 OR ARTS-2223
Theories of audio production for both broadcast and non-broadcast applications. Dual and multi-track styles, analog and digital equipment and computer editing are used. This course is normally offered in the spring semester.

## 3653 FIELD PRODUCTION AND EDITING

## Prerequisite: COMM-2643.

Involves more advanced television production techniques with a focus on production for broadband delivery systems, such as broadcast and cable. Examines closely the theories appropriate to quality television production. This course is normally offered in the spring semester.

3703 MOTION GRAPHICS
Prerequisite: ARTS-1103 and COMM-2643.

Use of software (Aftereffects and Photoshop) in the creation of motion graphics for broadcast and multimedia. This course is normally offered in the spring semester of evennumbered years

## 3723 INTERVIEWING

Prerequisite: Junior standing with COMM-2113 recommended.
Provides the student with the understanding and skills necessary for a variety of interviewing situations, including radio and television. Students are taught listening skills and how to implement these techniques for more effective interviews. This course is normally offered in the spring semester.

## 3733 MEDIA MARKETING AND SALES

Prerequisite: Junior standing.
Stresses understanding of basic media tools such as radio and television ratings analysis; national rating services and rate cards; media buying for specific demographic targets; and the use of various media as marketing vehicles. This course is normally offered in the spring semester of odd numbered years.

## 3743 PUBLIC RELATIONS WRITING AND PRODUCTION TECHNIQUES

Prerequisite: COMM-2823 or instructor consent.
Designed to survey the commonly used communications tools in public relations with emphasis on how to work with them. Students will learn to design questionnaires, create annual reports, arrange press conferences, script slide shows, and perform other public relations functions that require special expertise. This course is normally offered in the fall semester of odd numbered years.

## 3823 FEATURE WRITING

Prerequisite: COMM-2113.
Continuation of COMM-2113, including lectures and labs in interviewing, feature writing, opinion writing, investigative journalism, sports, and other specialized areas of journalism. This course is normally offered in the fall semester of even numbered years.

## 3913 HOMILETICS I: PREPARATION \& DELIVERY OF RELIGIOUS SPEECHES

## Prerequisite: COMM-1213.

A study of the theory, practice and evaluation of the preparation and delivery of sermons and religious speeches. Same as BIBL-3913. This course is normally offered in the fall semester.

## 4103 MODERN DRAMA

Same as ENGL-4813 when the genre offered is modern drama. This course is normally offered in the spring semester of even numbered years.

## 4113 PERSUASION AND ADVOCACY

An examination of classical and contemporary theories of social influence with an emphasis on the practical applications of these theories in politics, advertising, religion, and interpersonal communication. This course is normally offered in the fall or summer semester.

## 4123 ELECTRONIC NEWS PRODUCING

Prerequisite: COMM 2833.
A course focused on the essential task of producing television news for broadcast, cable, or the web including newscasts, segments, and special programming. A section of the course also focuses on continuing to develop one's ability to prepare effective news packages. Producing involves a great deal of writing. Writing helps the news to be communicated effectively and efficiently. Opportunities for news producers are increasing as local stations add more newscasts or news-oriented programs to differentiate themselves from cable or satellite channels. In addition, there are many specialized channels that need producers for regular and special programming 24/7. This course is normally offered in the fall semester of odd numbered years.

## 4523 CONFLICT RESOLUTION AND NEGOTIATION

Prerequisite: Junior/Senior standing or instructor permission.
In this course, learners discover the theory, research, practice, and Biblical principles of communication as it relates to understanding and negotiating interpersonal conflict.

## 4631 SENIOR SEMINAR IN COMMUNICATION

Prerequisites: Communication or Mass Communication major; Senior standing Resumes and resume tapes or CD-ROM will be prepared by the students. This course is normally offered in the fall semester.

## 4633 INTERCULTURAL COMMUNICATION I

A survey of the basic concepts of how people communicate effectively across cultural boundaries, with special attention given to the complex nature culture plays in communication. COMM-4633 fosters in students an understanding and appreciation of their own culture and cultural patterns of communication and those of other cultures. Same as ENGL-4633, MISS-4633 and SOCI-4633 This course is normally offered every semester.

## 4663 SYMPOSIUM IN PR RESEARCH AND PRACTICE

Prerequisite: Must be Public Relations major, Senior standing.
Symposium in PR Research \& Practice is the capstone course in the sequence of instruction offered in public relations. This course provides students with the opportunity to apply the fundamentals of what has been learned over the course of study in public relations to actual client work. This course is normally offered in the spring semester as
needed.

## 4713 MEDIA LAW

Prerequisites: Junior standing.
Looks at past and current legal decisions that shape the role of the media in society today.
The course also examines the legal aspects of both the print and electronic media and also the role of the regulatory agency on the electronic media. This course is normally offered in the fall semester.

## 4723 MEDIA ETHICS

Prerequisites: Senior standing.
Designed to introduce the student to the ethical decisions that must be made by both the practitioners and the consumers of the mass media. It is designed to supplement the legal course and give the Christian a higher standard of performance. This course is normally offered in the spring semester.

## 4733 COMMUNICATION ETHICS

Prerequisite: Senior standing or instructor's consent.
Examines a variety of ethical approaches to communicating. Students will investigate motives for choice making among what may appear to be equally compelling or attractive choices. The assumption of responsibility for communication choices by communicators will highlight class assignments. This course is normally offered in the fall semester of odd numbered years.

## 4743 INTERNATIONAL SOCIAL ENTREPRENEURSHIP

A study and application of the international consulting process using social-entrepreneurial tools to address problems in developing nations. Topics addressed include: poverty, "when helping hurts", microfinance, access to capital, problems with aid, social entrepreneurship, fair trade, performance analysis, conscious capitalism, and service centered missions. Each student will work individually and in a team to address a specific, real-world problem or change effort currently underway in a variety of international settings. Same as INTL4743, MGMT-4743, and MISS-4743 This course is normally offered in the spring semester.

## 4763 ADVANCED MEDIA PRODUCTION

Prerequisites: Video for Media, Audio for Media, Foundations of Digital Visuals, and Broadcast Graphics with a grade of "C" or better.
This course provides the opportunity to produce capstone works from one's training in media production and to read and reflect on primary materials.

## 4773 HOMLETICS II: ADVANCED HOMILETICS

Prerequisite: BIBL-3913 or COMM-3913
This course is a study of the writing and presentation of sermons, with an emphasis on homiletic form and effective public communication. The course also emphasizes analysis of sermons and preparation of a major sermon to be delivered before the Bible faculty. This course is normally offered every other spring in odd numbered years.
Same as BIBL-4763. Non-textual.

## 4810 SPECIAL STUDIES

An advanced, in-depth study of a particular problem area of mass communication. Content varies, and course may be repeated. (1-3 hours). This course is offered as needed.

## 4821 MEDIA INTERNSHIP

Prerequisite: Instructor consent.
Practical experience designed to acquaint the student with a specific area of the media in order to assist the student in achieving career objectives. 1-2 hours credit, depending upon the number of hours worked each week. This course is offered as needed.

## 4831 COMMUNICATION INTERNSHIP

Prerequisite: Instructor consent.
Practical experience designed to acquaint the student with a specific area of the communication field in order to assist the student in achieving career objectives. 3 hours credit, depending upon the number of hours worked each week. This course is offered as needed.

## 4900 INDEPENDENT STUDY IN COMMUNICATION

Prerequisite: Instructor consent.
Requires a creative project involving the student in a deeper study of some area of communication. Guided readings or research project based on prospectus is presented by the student after consultation with the instructor. The course may be taken by juniors and seniors with approval by the departmental chair after consultation with the instructor. This course is offered as needed.

## COMPUTER ENGINEERING (CENG)

## 3113 DATA COMMUNICATIONS AND NETWORKING

Prerequisites: Admitted into ECE or CMSC-3443.
An introduction to computer and data communications and types of networks. Strong emphasis in wired and wireless network design with mathematical modeling, simulation, and trade-offs in protocols and hardware. Examination of commonly used protocols and standards. Lecture - 2 hours; Laboratory -3 hours. This course is normally offered in the fall semester.

## 3203 INTRODUCTION TO MICROPROCESSORS

Prerequisite: ENGR-2544.
Introduction to the architecture and programming of microprocessors and microcontrollers. Computer organization, addressing modes, assembly language programming techniques and interfacing. Lecture -3 hours. This class is normally offered in the fall semester.

## 3213 COMPUTER SYSTEMS

Prerequisite: CENG-3203.
System design using microprocessors. Top-down system design, memory mapping, interrupts and real-time events, analog and digital I/O, device interfacing, advanced programming techniques. Lecture - 2 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 4113 SOFTWARE AND NETWORK ENGINEERING

Prerequisite: CENG-3113.
A continuation of the study of data communication networks, beginning with advanced topics of modern virtual network protocols, aggregate network design principles. These principles are then applied to an in-depth study of network systems design including processors, memory architectures, and switch fabric technologies. Lecture - 2 hours; Laboratory 3 hours. This course is normally offered in the spring semester.

## 4223 EMBEDDED SYSTEMS DESIGN

Prerequisite: Admitted to ECE, CENG-3203
Embedded microcontroller system design using an integrated development environment (IDE). Starting with a set of specifications, a self-contained finished microprocessorbased product will be designed and built. Topics will include controller selection, software development, layout of printed-circuit boards, and test/validation strategies. Lecture - 2 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 4233 ADVANCED COMPUTER ARCHITECTURE

Prerequisite: CENG-3213.
Computer organization and design. Fundamentals of computer design, instruction set architectures, instruction-level parallelism, pipelining principles, speculation, thread-level parallelism, memory hierarchies, cache principles, virtual memory, multiprocessors, storage systems, clusters, historical perspectives. Lecture - 3 hours. This course is normally offered in the spring semester.

## 4303 HDL DESIGN OF MICROPROCESSORS

Prerequisites: Admitted into ECE, CENG-3203.
A continuation of the study of data communication networks, beginning with advanced topics of modern virtual network protocols and agrigate network design principles. The course includes in-depth study of network design including processors, memory architectuers and switching technologies. Students will apply these concepts in the lab by developing their own network system on a hand held mobile platform. Lecture - 2 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 4732 SYSTEMS DESIGN I

Prerequisite: Consent of ECE department.
A recap and extension of problem-solving skills introduced in earlier using a systems design approach to prepare the student for the capstone design project work of CENG4743 and CENG-4753; topics include engineering design terminology, methodology and procedures; technical memos and reports; safety, ethics, information gathering, and team dynamics. Significant emphasis on oral presentations is included. Laboratory - 3 hours (Same as MECH-4732 and ELEC-4753.) This course is normally offered In the spring semester.

## 4743 SYSTEMS DESIGN II

Prerequisite: CENG-4732. Corequisite: ENGR-3213.
An implementation of the design methodology covered in Systems Design I. Applications of research and design relating to real world or industry problems; interaction with other fields of engineering and science. CENG-4743 and CENG-4753 constitute a single two-semester project experience. Laboratory -6 hours. Same as MECH-4743 and ELEC-4743. This course is normally offered in the fall semester

## 4753 SYSTEMS DESIGN III

Prerequisites: CENG-4743.
A continuation and completion of the capstone design project begun in CENG-4743.
Students not successfully completing the entire project must normally retake CENG$4743 / 4753$ with a new project assignment. Laboratory - 6 hours. (Same as MECH-4753 and ELEC-4753.) This course is normally offered in the spring semester.

## COMPUTER SCIENCE (CMSC)

## 1113 PROGRAMMING I

Prerequisite: Corequisite-CMSC-1113L.
An introduction to the discipline of computing. The course has three major objectives: to present computing as a discipline, to develop skills in problem solving using a computer and to teach the software development process. This course includes laboratory experiences in computer science. Lecture - 3 hours; Laboratory -2 hours. This course is normally offered every semester.

## 1123 PROGRAMMING II

Prerequisites: CMSC-1113 and CMSC-1313 or permission of instructor.

Corequisite: CMSC-1123L
Continues the development of basic topics in computing, including algorithm design and implementation, and basic data structures such as linked lists and recursion. The course focuses on the software development process, including application design, testing and documentation. This course includes laboratory experiences in computer science. Lecture -3 hours; Laboratory - 2 hours. This course is normally offered every semester.

1313 SOFTWARE ENGINEERING I-INTRODUCTION
A basic introduction to Software Engineering. Topics include software development lifecycle, computer systems, software systems and Internet architectures, and basic tools (MS Word, MS Excel, MS Access, wiki, CMS). This course is normally offered in the fall semester.

## 2133 OBJECT ORIENTED PROGRAMMING

Prerequisite: CMSC-1123.
Covers object oriented design and implementation issues. Topics include an introduction to modeling tools (e.g, UML), abstraction, inheritance, polymorphism, memory management, and common design patterns. The course also provides an introduction to event handling and GUI development using relevant class libraries. Lecture - 3 hours; Laboratory - 2 hours. This course is normally offered in the fall semester.

## 2213 INTERNET APPLICATION DEVELOPMENT

Prerequisite: CMSC-2133 or CMSC-2313.
An introduction to how the Internet works, the software tools used to develop applications for the Internet and the development of skills using those tools. The tools will include HTML, CSS, JavaScript, webservers, and application servers. This course is normally offered in the spring.

## 2233 DATA STRUCTURES AND ALGORITHM ANALYSIS

Prerequisites: MATH-1623 and CMSC-2133.
Covers the characteristics of data structures and their implementation. Topics include advanced lists, trees, hashing schemes, and introductory algorithm analysis. This course is normally offered in the spring semester.

## 2313 SOFTWARE ENGINEERING II-PRACTICES

Prerequisite: CMSC-1123.
An introduction to Software Engineering practices. Topics include software engineering processes and tools for the major software development activities, including requirements, design, develop, tests, deploy, and maintain. It also includes the discussion of software development methods, including Waterfall and Agile. This course is normally offered in the fall semester.

## 2413 ASSEMBLY LANGUAGE

Prerequisites: CMSC-1123 and MATH-1623 or departmental permission. An introduction to assembly language concepts and programming. The topics include binary and hexadecimal number systems, data representation methods, addressing techniques and subroutines. This course is normally offered in the fall semseter.

## 3203 GAME PROGRAMMING

Prerequisites: CMSC-2133
This course provides an introduction to game programming within a contemporary game engine environment (e.g., Unity3D). Topics include tool usage, basic asset creation, the game engine API, and data structures and logic for two and three-dimensional games. This course assumes familiarity with at least one object oriented programming language. This course is offered every spring semester.

## 3313 SOFTWARE ENGINEERING III-ETHICS

Prerequisite: CMSC-2313. Provides insight into the ethics required in computer science and software engineering practice. It will also include the role of the computer in modern society and its impact upon the individual. Topics include ethical decision-making, legal issues, dangers posed by computers, public perception of computers, and computer scientists' and futurists' views of computing. This course is offered in the fall semester of odd numbered years.

## 3443 COMPUTER ORGANIZATION AND ARCHITECTURE

Prerequisite: CMSC-2413.
An introduction to the organization and structuring of the major hardware components of computers. Emphasis is placed upon the mechanics of information transfer and contro within a digital system and the fundamentals of logic design. Topics include the control unit, memory, ALU, I/O and interfacing. Some lab experience is included. This course is normally offered in the spring semester.

## 3633 INTRODUCTION TO CYBER SECURITY

This course provides a comprehensive, up-to-date global body of knowledge that ensures students have the right information security knowledge and skills to be successful in IT operational roles to mitigate security concerns and guard against the impact of malicious activity. This course prepares students for the Systems Security Certified Practitioner (ISC2 SSCP) certification exam.

## 4103 DATA COMMUNICATIONS AND NETWORKING

Prerequisite: CMSC-3443 or ELEC-3203.
A study of the concepts and terminology of data communications, network design, and distributed information systems. Topics include transmission service and equipment characteristics, protocols, data communication software, and federal regulatory policy. This
course is normally offered in the fall semester.

## 4113 HUMAN COMPUTER INTERACTION

Prerequisite: CMSC-2233
An introduction to user interface design and user experience. Topics include HCl concepts and principles, usability, HCl evaluation, HCl design, interaction styles, and interaction devices. This course is normally offered in the fall semester of odd numbered years.

## 4123 SOFTWARE ENGINEERING IV-TOOLS

Prerequisite: CMSC-2233 and CMSC-2313
This course will provide the student with practical experience in the use of software tools in a team environment. This course is the first in a two-course sequence (see also CMSC-4243) in which students are organized into teams to develop a software product typically for an external customer. Tools covered include configuration management tools, project management software, software design/implementation tools, and programming languages, frameworks, and libraries required to create the product. This course is normally offered in the fall semester of even numbered years.

## 4133 INTRODUCTION TO PARALLEL PROGRAMMING

Prerequisite: CMSC-2133. This course is an introductory course in parallel programming for upp er-division undergraduate and graduate students who have already learned to program in C, C++, Java, or C\#. The goal of the course will be to equip computer science students to be able to program multi core computers and parallel processors generally for scientific, engineering, and business applications.

## 4223 COMPUTER SIMULATION

Prerequisite: CMSC-2233.
An introduction to the application of programming to the design and implementation of computer simulations. Topics include simulation languages and the application of stochastic processes to simulation theory. This course is normally offered in the spring semester of even numbered years.

## 4233 MOBILE APPLICATION

Prerequisite: CMSC-2233
An introduction to mobile application software development. In this course the student will learn to develop mobile apps. Topics will include mobile platforms and mobile application development tools. This course is normally offered every semester.

## 4243 SOFTWARE ENGINEERING V-PROJECTS

Prerequisites: CMSC-4123 and Pre-or Co-requisite CMSC-4323
This is a project-based course in which students work on teams to complete the entire lifecycle of a significant software project, from requirements analysis to system delivery and testing. In addition to software system deliverables, teams will be responsible for writing software specifications and training materials, as well as making multiple presentations to customers and faculty. This course is normally offered in the spring semester of odd numbered years.

## 4323 DATABASE SYSTEMS

Prerequisite: CMSC-2233.
An introduction to database systems. Topics include the design and implementation of the major database models. This course is normally offered in the fall semester of even numbered years.

## 4413 OPERATING SYSTEMS

Prerequisites: CMSC-2233 and CMSC-3443 or CENG-3203.
An examination of the major features of an operating system and its interaction with the hardware at the register level. Topics include memory management, job scheduling, and multi-programming. This course is normally offered in the spring semester.

## 4423 COMPUTER GRAPHICS

Prerequisites: CMSC-2233.
An introduction to the fundamental techniques of computer graphics. Topics include two and three-dimensional graphing, hidden-surface algorithms, animation, and applications of graphics. This course is normally offered in the fall semester of odd numbered years.

## 4433 COMPILER CONSTRUCTION

Prerequisite: CMSC-2233.
An introduction to compiler construction. Topics will include lexical analysis, syntax analysis, intermediate code generation, runtime environments, code generation and optimization. This course is offered as needed.

## 4443 CRYPTOGRAPH

Prerequisites: CMSC-2233
This course covers foundations and practical
applications of modern cryptography. Ideas about defining security, hardness assumptions, and the possibility of proving security of complicated constructions based on low-level primitives will all be explored. Topics include: principles of modern cryptography, classical encryption schemes, private-key encryption, message authentication, hash functions, public-key encryption, and digital signatures. By the end of the course, the student will have a firm grasp of cryptographic primitives in wide use today and a knowledge of how to combine these in order to develop modern protocols for secure communciation. Students cannot receive credit for both CMSC-4443 and CMSC-5523.

## 4513 PROGRAMMING LANGUAGES

Prerequisite: CMSC-2233.
A study of the organization of programming languages. Topics include data types,
sequence control, data control, and operating environment considerations. Several highlevel languages will be studied. This course is normally offered in the spring semester of odd numbered years.

## 4643 NETWORK SECURITY

Laboratory 2 hours. Prerequisite: CENG-3113: Data Communications and Networking This course covers cloud computing architecture and cloud security concepts including access control and management, governance, logging, and encryption methods. It also covers security-related compliance protocols and risk management strategies, as well as procedures related to auditing cloud security infrastructure. Students will have hands-on experience designing solutions for AWS cloud-based platforms and operations that maintain data availability while protecting the confidentiality and integrity of information. This course prepares students for the Certified Cloud Security Professional (ISC2 CCSP) certification exam.

## 4653 CLOUD ARCHITECTURE AND SECURITY

Laboratory 2 hours. Prerequisite: CMSC 4643 or CMSC 5643.
This course covers cloud computing architecture and cloud security concepts including access control and management, governance, logging, and encryption methods. It also covers security-related compliance protocols and risk management strategies, as well as proceduresrelated to auditing cloud security infrastructure. Students will have handson experience designing solutions for AWS cloud-based platforms and operations that maintain data availability while protecting the confidentiality and integrity of information. This includes security controls,disaster recovery plans, and continuity management plans that address physical, logical, and human factors. This course prepares students for the Certified Cloud Security Professional (ISC2 CCSP) certification exam.

## 4663 NETWORK FORENSICS

Laboratory 2 hours. Prerequisite: CMSC 4643 or CMSC 5643. This course introduces digital forensic concepts and practices on local area networks, wide area networks and large scale networks such as the Internet. Topics include investigative techniques, and how to conduct an investigation, manage evidence and follow a cyber-trail. A large part of the course involves demonstrations and hands-on labs, including: use of network forensic tools such as packet monitors, security information and event managers (SIEMs), tracers, and other tools useful for analyzing events. This course prepares students for the Certified Cyber Forensics Professional (ISC2 CCFP) certification exam.

## 4673 COMPUTER SYSTEM RISK MANAGEMENT

Prerequisite: CMSC-4653. This course applies the NIST Risk Management Framework (RMF) as students complete project deliverables and communicate project results, integrating Enterprise and Cloud System risk management principles and standards. Students will develop in-depth analytic competencies to relevant risk problems. This course prepares students for the Certified Authorization Professional (ISC2-CAP) certification exam.

## 4683 OFFENSIVE SECURITY AND PENETRATION TESTING

Laboratory 2 hours. Prerequisite: CMSC-4653. This course prepares students to conduct successful offensive security, penetration testing, and ethical hacking projects. The course covers proper planning, scoping and reconnaissance, and then dives deep into scanning, target exploitation, password attacks, and wireless and Web applications with detailed hands-on exercises. Students will participate in an intensive, hands-on Capture the Flag exercise, conducting a penetration test against a sample target organization.

## 4713 ARTIFICIAL INTELLIGENCE

Prerequisite: CMSC-2233.
An introduction to the study of artificial intelligence. Topics include problem solving using state-space and problem reduction techniques, search methods, game playing, and predicate calculus. This course is normally offered every spring semester.

## 4811 SEMINAR IN COMPUTER SCIENCE

Prerequisite: 35 hours of computer science.
A seminar designed to unite the varied elements of the computer science major. A written and oral presentation covering a current research topic in computer science is required.
This course is normally offered every semester.

## 4900 INDEPENDENT STUDY IN COMPUTER SCIENCE

Assigned research, readings, and reports based on the need of the individual student. May be taken only with permission of the instructor and of the departmental chair. See departmental guidelines for further information. This course is offered as needed.

## 4901 PRACTICUM FOR COMPUTER SCIENCE

On job experience is a valuable way for students majoring in Computer Science to practice and improve their skills. Working with real world problems enhances the theoretical curriculum we offer and gives students a new perspective on concepts they have been taught. Enrollment in this course will be under the supervision of an individual Computer Science professor, who will work with the student's supervisor. A journal or summary paper of the internship experience will be required at the conclusion of the employment period. A 12 -week practicum at 20 hours per week will correspond to 1 hour of credit. Prior permission of the Computer Science department is necessary for enrollment. 1 credit hour.

## CULTURE (CLTR)

## 1101 STUDY ABROAD SEMINAR-EUROPE

This course is required for students participating in the Summer or Fall European Study Programs. Students conduct initial research on the countries they will visit as part of the program and complete the necessary pre-departure preparation. This course is normally offered in the spring semester

## 1201 STUDY ABROAD SEMINAR-ASIAN STUDIES

This course is required for students participating in the Asian Studies Program. Students conduct initial research on the countries they will visit as part of the program and complete the necessary pre-departure preparation. This course is normally offered in the spring semester.

## 1301 STUDY ABROAD SEMINAR - LATIN AMERICA

This course is required for students participating in the Latin American study program. Students conduct initial research on the countries they will visit as part of the program and complete the necessary pre-departure preparation. This course is normally offered in the spring semester.

## 2103 CROSS CULTURAL PERSPECTIVES

This course incorporates an interdisciplinary course to analyze the topics of identity and culture, while focusing on how these concepts interact within the context of a study abroad experience. Students will examine culture, history, politics, religion, art, and music to achieve a deeper understanding of civilization and culture through the lens of the study abroad location. For students on a study abroad trip.

## 2913 WESTERN ARTS AND CULTURE

An analysis of the confluent events and expressions - historical, political, religious, philosophical, literary, artistic, and scientific - that shaped Western art, culture, and values. Important connections, interrelationships, and conversations among key texts, artistic works, historical events and interacting cultures. This course Is normally offered in the fall semester.

## EARLY CHILDHOOD EDUCATION (ECED)

## 3013 NATURE AND CHARACTERISTICS OF EARLY CHILDHOOD

Prerequisites: admission to teacher education; EDUC-3213 (may enroll concurrently). After studying the broad field of Early Childhood in relation to its multiple historical, philosophical, and social foundations, the candidate will examine how these foundations influence current thought and practice. After exploring the characteristics of the young child from birth to age eight, the candidate will demonstrate observation techniques and planning skills related to developmentally appropriate practice. The candidate will also reflect on the role of the teacher and ethical considerations of the Early Childhood field. This course includes field experience which is scheduled within the time allotment of the class. (Students whose programs do not require admission to teacher education but require this course will receive credit for CHDV-3013, which cannot be applied to licensure requirements.) This course is normally offered in the fall semester.

## 3023 EMERGENT LITERACY

Prerequisites: admission to teacher education; ECED-3013.
This course is a study of the emerging process of language development from infancy through the primary years. The candidate will observe and document a child's development through all four age categories, infant, toddler, preschooler, and primary-aged (eight practicum hours). The candidate will demonstrate understanding of and respect for the socio-cultural diversity of literacy development as well as the interrelationships of culture, language, thought, and the function of the home language. Additionally, the candidate will study children's literature to develop an understanding that literature forms a central focus for language and literacy development. The candidate will apply various methods of using literature with children in the home and classroom settings including reading aloud to a child once per week for 14 weeks (eight practicum hours). (Students whose programs do not require admission to teacher education but require this course will receive credit for CHDV-3023 which cannot be applied to licensure requirements). Same as CHDV-3023 and ELEM-3023. This course is normally offered every fall semester.

## 4013 COGNITIVE SKILLS

Prerequisites: admission to teacher education; ECED-3013.
Practicum: 30 hours, ECED-4013P.
This is a study of current thought and practice in how young children from birth to age eight learn. This course gives pre-service teachers opportunities in the implementation of meaningful, integrated learning experiences with emphasis in math, science, and social studies. The course also includes the use of developmentally appropriate methods that encourage open-ended questioning, problem solving, cooperative learning, inquiry, integrated curriculum, and the value of play. This course is normally offered in the spring semester.

## 4023 TOPICS IN EARLY CHILDHOOD

Prerequisites: admission to teacher education; ECED-3013.
The candidate will describe and apply behavior and guidance theories for the young child from infancy through age eight. The candidate will also demonstrate techniques for planning and implementation of parental involvement, and understanding the children and their families in the context of society. (Students whose degree programs do not require admission to teacher education but require this course will receive credit for CHDV-4023,
which cannot be applied to licensure requirements.) This course is normally offered every spring semester.

## 4111 EARLY CHILDHOOD PRACTICUM

Prerequisites: admission to teacher education; ECED-3013; ECED-3023 and ECED-4013. Practicum: 60 hours.
This class will meet one hour a week for approximately six weeks to discuss the aspect of early childhood professionalism. The field experience of 40 clock hours is divided between working in an infant/toddler child development program ( 30 hours) and completing an extensive child case study ( 10 hours). It is designed to provide the candidate the opportunity to engage in activities with young children and their families, based on what the candidate has studied in previous or concurrent early childhood coursework. While in the classroom, the teacher candidate will observe both the children and the teachers, interact with children, and plan and implement activities with the children. In addition to the classroom time, the candidate will closely observe a child within the context of the family, write a developmental profile of the child, and discuss the profile with the parents. This course is normally offered every semester.

## ECONOMICS (ECON)

## 2113 MACROECONOMIC PRINCIPLES

A study of the economic system as a whole, dealing with price levels, employment, the level of total production of goods and services and growth. The course includes study of the free enterprise system and of government monetary and fiscal policy. This course is normally offered every semester.

## 2213 MICROECONOMIC PRINCIPLES

Prerequisite: ECON-2113.
A study of specific economic units within a free enterprise economy such as individual consumers, businesses, or industries. The pricing and output of goods and services and the pricing and employment of labor and capital are studied. This course is normally offered every semester.

## 4900 INDEPENDENT STUDY IN ECONOMICS

Prerequisites: Junior or Senior standing and approval of the chair of the school. (1-3 hours). Guided readings or research projects arranged in consultation with advisor. This course is offered as needed.

## EDUCATION (EDUC)

## 3121 ORIENTATION TO TEACHER EDUCATION

Prerequisites: ENGL-1113, grade of C or above, GPA 2.75.
Corequisite: Concurrent enrollment in EDUC-3122.
Practicum: 33 hours.
Prospective candidates will be placed in a public school with a diverse student population to observe instructional classroom management and assessment strategies used by classroom teachers. Students will apply for admission to Teacher Education and will begin the Teacher Education Documentation Portfolio process required by Oklahoma. This course is normally offered every semester.

## 3122 THE SCHOOL IN AMERICAN CULTURE

Prerequisites: ENGL-1113 grade of C or above, GPA 2.75.
Corequisite: Concurrent enrollment in EDUC-3121.
Prospective candidates will be able to explain the role and contributions of education in a democratic society and to state their personal philosophies of education. Emphasis is placed on history, philosophies, and current trends. Course must be completed with a grade of C or better to gain admission to Teacher Education. This course is normally offered every semester.

## 3131 CLASSROOM MANAGEMENT STRATEGIES

Prerequisites: Admission to student teaching; Overall GPA 2.75, Major GPA 3.0.
Corequisite: Concurrent enrollment in EDUC-4133 and student teaching. Concurrent enrollment in practicum (recomended).
Candidates will relate self-image and communications skills to classroom, parent, and colleague interaction. Emphasis is placed on warmth, empathy, and genuineness; cultural diversity issues will be strongly emphasized through participation and activites, guest speakers, and indepth study. Candidates will review behavior in classroom management theories in preparation for clinical practice. This course is normally offered every semester.

## 3213 LEARNING, INSTRUCTION AND ASSESSMENT

Prerequisite: Admission to Teacher Education.
Candidates will be able to relate contemporary theories of learning to instruction and develop skill in planning, instruction, and assessment of student learning. Focus: Oklahoma core curriculum and instructional strategies, plans based in Oklahoma C3 Standards, and common core state standards. (Majors in the College of Biblical Studies may enroll with permission of instructor as the only prerequisite.) This course is normally offered every semester.

## 3422 EDUCATIONAL TECHNOLOGY

Prerequisite: Admission to Teacher Education.
Corequisite: Concurrent enrollment in appropriate student teaching course.
This online course will introduce the use of
Google products to prepare instructional materials to enhance classroom instruction.

Competence in digital communication with parents and students will be stressed, as well as ethical usage of educational technology. This course is normally offered in the fall and spring semesters.

## 3723 EDUCATION OF THE EXCEPTIONAL CHILD

Prerequisite: Admission to Teacher Education. This course should be taken the semester before student teaching.
After surveying various types of exceptionalities found in children and adolescents, candidates will be able to suggest adaptations in classrooms and teaching strategies to meet the needs of PK-12 students who have identified exceptionalities. This course is normally offered every semester and some summers.

## 4012 HUMAN RELATIONS

Prerequisites: Admission to student teaching; Overall GPA 2.75, Major GPA 3.0. Corequisite: Concurrent enrollment in EDUC-4132 and student teaching. Candidates will relate self-image and communications skills to classroom, parent, and colleague interaction. Emphasis is placed on warmth, empathy, and genuineness; cultural diversity issues will be strongly emphasized through participation and activities, guest speakers, and in-depth study. This course is normally offered every semester.

## 4112 LITERACY IN THE SECONDARY CONTENT AREAS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Practicum: 33 hours (EDUC-4112P).
Candidates will learn and practice instructional strategies to effectively integrate writing,
listening, speaking, reading comprehension, vocabulary development, and digital literacies into their teaching so that all students will learn. Candidates will focus on literacy as it applies to the various content areas. This course is normally offered in the spring semester.

## 4131 APPLIED INSTRUCTIONAL AND ASSESSMENT STRATEGIES

Prerequisites: Admission to student teaching
A one hour course for Senior education majors taken during the student teaching semester. Candidates will acquire additional knowledge in the areas of effective instructional strategies and assessment practices and apply their learning in the field via the Teacher Work Sample (TWS). This course is normally offered in every semester.

## 4132 CRITICAL ISSUES IN EDUCATION

Prerequisites: Admission to student teaching; Overall GPA 2.75, Major GPA 3.0
Corequisite: Concurrent enrollment EDUC-4012 and student teaching.
Candidates demonstrate skill in communicating with students, parents, colleagues, and others in the school community. Emphasis is placed on the role of the teaching profession in curriculum change and school improvement. This course is normally offered every semester.

## 4422 ELEMENTARY MUSIC METHODS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Methods for teaching general music in the elementary school. Course requirements include 18 hours of field experience. This course is normally offered in the fall semester odd years.

## 4432 SECONDARY INSTRUMENTAL MUSIC METHODS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Organization and administration of the instrumental curriculum, including teaching methods and materials for teaching instrumental music at secondary school levels. This course includes 18 hours of field experience. This course is normally offered in the fall semester even years.

## 4442 SECONDARY VOCAL MUSIC METHODS

Prerequisites: EDUC-3213; Admission to Teacher Education
Methods for teaching vocal music at secondary school levels. This course includes 18 hours of field experience. This course normally offered in the fall semester even years.

## 4463 METHODS OF TEACHING MATHEMATICS IN SECONDARY SCHOOLS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Practicum: 45 hours (EDUC-4463P).
Methods and materials for instruction and evaluation in mathematics at secondary school levels. The course includes a practicum. This course is normally offered in the fall semester.

## 4473 METHODS OF TEACHING SOCIAL STUDIES IN SECONDARY SCHOOLS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Practicum: 45 hours (EDUC-4473P).
Methods and materials for instruction and evaluation in social studies at secondary school levels. The course includes a practicum. This course is normally offered in the fall semester.

## 4533 METHODS OF TEACHING SCIENCE IN SECONDARY SCHOOLS

Prerequisites: EDUC-3213; Admission to Teacher Education.
Practicum: 45 hours (EDUC-4533P).
Methods and materials for instruction and evaluation in science at secondary school levels.
The course includes a practicum. This course is normally offered in the fall semester.

4553 METHODS OF TEACHING LANGUAGE ARTS IN SECONDARY SCHOOLS
Prerequisites: EDUC-3213; Admission to Teacher Education.
Practicum: 45 hours (EDUC-4553P).
Methods and materials for instruction and evaluation in language arts at secondary school levels. The course includes a practicum. This course is normally offered in the fall semester.

## 4618 STUDENT TEACHING IN THE ELEMENTARY SCHOOL

Prerequisites: Admission to student teaching; Overall GPA 2.75, Major GPA 3.0.
Corequisite: Concurrent enrollment in EDUC-4012, EDUC-4131 and EDUC-4132.
Candidates will demonstrate competencies required by Oklahoma for licensure in elementary education during two 6 -week assignments in two grade levels in public schools in the Oklahoma City metropolitan area. Each OC candidate will be observed and evaluated regularly by a faculty member from the OC School of Education. Student teachers will meet weekly with university supervisors. This course is normally offered every semester.

## 4718 STUDENT TEACHING IN THE SECONDARY SCHOOL

Prerequisites: Admission to student teaching; major GPA 3.0.
Other: Concurrent enrollment in EDUC-4012, EDUC-4131 and EDUC-4132.
Candidates will demonstrate competencies required by Oklahoma for licensure in grades 7-12 during two 6 -week assignments, one in a high school and one in a middle/junior high school, in the Oklahoma City metropolitan area. Each OC candidate will be observed and evaluated regularly by an OC School of Education faculty member. Student teachers will meet on campus weekly with university supervisors. This course is normally offered every semester.

## 4818 STUDENT TEACHING IN THE ELEMENTARY AND SECONDARY SCHOOLS

Prerequisites: Admission to student teaching; Overall GPA 2.75, Major GPA 3.0.
Corequisite: Concurrent enrollment in EDUC-4012, EDUC-4131 and EDUC-4132.
Candidates will demonstrate competencies required by Oklahoma for licensure in grades K -12. Candidates will be assigned to a secondary school, either junior high/middle or high school, and to an elementary school (Oklahoma City metropolitan area) to complete 6 weeks of student teaching in each. Each OC candidate is observed and evaluated regularly by an OC School of Education faculty member. Student teachers will meet weekly with university supervisors. This course is normally offered every semester.

## 4900 INDEPENDENT STUDY IN PROFESSIONAL EDUCATION

Prerequisites: Junior or Senior standing; Approval of the Chair of the School of Education. Assigned reading and reports based on the needs of the individual student. This course is offered as needed.

## ELECTRICAL ENGINEERING (ELEC)

3303 ANALOG ELECTRONICS
Prerequisite: Admitted into ECE.
Analog circuits with an emphasis on power circuits, transformers, operational amplifiers, and interfacing with sensors and digital systems. Lecture -2 hours; Laboratory -3 hours.
This course is normally offered in the fall semester.

## 3313 ELECTRONIC DEVICES

Prerequisite: Admitted into ECE.
Introduction to basic semiconductor devices: diodes, bipolar junction transistors, and field-effect transistors. Discrete component electronics. Introduction to integrated circuits. Lecture - 2 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 3504 SIGNALS AND SYSTEMS

Prerequisite: Admitted into ECE.
Time and frequency domain analysis of discrete-time and continuous-time signals and systems. Fourier, Laplace and $Z$ transforms. Filtering and frequency response. Lecture - 3 hours; Laboratory -3 hours. This course is normally offered in the fall semester.

## 3523 DIGITAL SIGNAL PROCESSING

Prerequisites: ELEC-3504.
Analysis, design, and implementation of discrete-time systems. FIR/IIR systems, parametric and non-parametric power spectrum estimation and optimal filtering, finite-word length effects. Lecture -2 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 3613 ELECTROMAGNETIC FIELDS

Prerequisite: Admitted into ECE.
A study of Maxwell's equations and applications; EM waves, transmission lines, and introduction to antennas. Lecture - 3 hours; Laboratory -0 hours. This course is normally offered in the fall semester.

## 4113 COMMUNICATION SYSTEMS

Prerequisite: ELEC-3504.
Design and analysis of analog and digital communication systems in the presence noise.
Topics include capacity analysis, performance criteria, modulation systems and link analysis. Lecture -3 hours. This course is normally offered in the spring semester of oddnumbered years.

## 4323 SEMICONDUCTOR DEVICES

Prerequisite: ELEC-3313.
Introduction to physics of semiconductor devices. The three electronic devices from Introduction to Electronics are brought from basic physics to current-voltage characteristics and circuit models. Lecture - 3 hours. This course is normally offered in the summer semester.

## 4423 CONTROL SYSTEMS

Prerequisite: ELEC-3504.
Control system theory of continuous time systems. Modeling physical systems through transfer functions and state space descriptions. System performance measures including stability, transient response, steady state response, and sensitivity. Classical and modern control techniques; root locus, frequency response methods and PID control. Lecture - 2 hours; Laboratory - 3 hours. This course is offered as needed.

## 4523 SOFTWARE ENGINEERING OF REAL-TIME SYSTEMS

Prerequisite: ELEC-3504.
Design and implementation of real-time embedded digital signal processing systems DSP programming, real-time operating systems, parallel processing, host computer interfacing. Lecture - 2 hours; Laboratory - 3 hours. This course is normally offered in the fall semester.

## 4613 RADIO FREQUENCY ENGINEERING

Prerequisite: ELEC-3613.
Analysis and design of Radio Frequency circuits and systems. Network analysis parameters for system level RF design will be used to bridge earlier field theory analysis to modern RF circuit design techniques and software. Lecture - 2 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 4732 SYSTEMS DESIGN I

Prerequisite: Consent of ECE department.
A recap and extension of problem-solving skills introduced in earlier courses using a systems design approach to prepare the student for the capstone design project work of ELEC-4743 and ELEC-4753; topics include engineering design terminology, methodology and procedures; technical memos and reports; safety, ethics, information gathering, and team dynamics. Significant emphasis on oral presentations is included. Laboratory - 3 hours. (Same as MECH-4732 and CENG-4732.) This course is normally offered In the spring semester.

## 4743 SYSTEMS DESIGN II

Prerequisite: ELEC-4732. Corequisite: ENGR-3213.
An implementation of the design methodology covered in Systems Design I. Applications of research and design relating to real world or industry problems; interaction with other fields of engineering and science. ELEC-4743 and ELEC-4753 constitute a single two-semester project experience. Laboratory - 6 hours. (Same as MECH-4743 and CENG-4743.) This course is normally offered in the fall semester.

## 4753 SYSTEMS DESIGN III

## Prerequisite: ELEC-4743

A continuation and completion of the capstone design project begun in ELEC-4743. Students not successfully completing the entire project must normally retake ELEC-4743 and ELEC-4753 with a new project assignment. Laboratory - 6 hours. (Same as MECH4753 and CENG-4753.) This course is normally offered in the spring semester.

## 4920 INTERNSHIP FOR ENGINEERING PRACTICE

The engineering programs encourage all students to participate in at least one summer of engineering internship work. The engineering internship experience is very important to providing real-world application of the classroom experience and also has become an expectation by employers of engineers internationally. Enrollment in this course will be under the supervision of an individual engineering professor. A journal or summary paper of the internship experience will be required at the conclusion of the employment period. 1 to 3 credit hours. This course is offered on a case by case basis through coordination with the international office.

## ELEMENTARY EDUCATION (ELEM)

## 3023 EMERGENT LITERACY

Prerequisites: Admission to Teacher Education; ECED-3013.
This course is a study of the emerging process of language development from infancy through the primary years. The candidate will observe and document a child's development through all four age categories, infant, toddler, preschooler, and primary-aged (eight practicum hours). The candidate will demonstrate understanding of and respect for the socio-cultural diversity of literacy development as well as the interrelationships of culture, language, thought, and the function of the home language. Additionally, the candidate will study children's literature to develop an understanding that literature forms a central focus for language and literacy development. The candidate will apply various methods of using literature with children in the home and classroom settings including reading aloud to a child once per week for 14 weeks (eight practicum hours). (Students whose programs do not require admission to teacher education but require this course will receive credit for CHDV-3023 which cannot be applied to licensure requirements.) Same as ECED-3023 and CHDV-3023. This course is normally offered every fall semester.

## 3233 PRIMARY READING

Prerequisite: Admission to Teacher Education.
Practicum: 20 hours (ELEM-3233P).
The focus of this course includes the early developmental stages of literacy elements, including phonemic awareness, phonics, vocabulary, spelling, fluency, and comprehension. The construction of reading lesson plans, ELL students, student diversity, and a variety of learning styles will be addressed. During the practicum portion of the course, candidates will pre/post test and present lessons based upon the pre test results, assess, and reflect on gains in student learning. The role of RTI will be included. A case study is required. This course is normally offered in the spring semester.

## 3323 MOVEMENT AND FINE ARTS

Prerequisites: Admission to teacher education or concurrent enrollment in EDUC-3121 and EDUC-3122.
Candidates design materials, demonstrate instructional methods, and create activities for integrating movement, art and music, and health and fitness activities into the PK and elementary classroom. This course is normally offered in the spring semester.

## 3332 ELEMENTARY LANGUAGE ARTS

Prerequisites: Admission to Teacher Education; ELEM-3233.
Corequisite: Concurrent enrollment ELEM-3632, ELEM-3733, ELEM-3832; ELEM-3900P. The focus of this course includes writing (process, types, grammar, punctuation, spelling, handwriting), listening, speaking, viewing, visually representing, and assessment. The construction of language arts lesson plans, ELL students, student diversity, and a variety of learning styles will also be addressed. Candidates will be prepared to present language arts lessons in Primary Practicum using data gained from pre-testing to construct lesson plans and assess and reflect on gains in student learning. This course is normally offered in the fall semester.

## 3632 SOCIAL STUDIES FOR PRIMARY STUDENTS

Prerequisites: Admission to teacher education; EDUC-3213.
Corequisite: concurrent enrollment in ELEM-3333, ELEM-3733, ELEM-3832; ELEM-3900P. Candidates will rely on current thought and trends in social studies instruction to develop teaching strategies which engage students in learning and which encourage the development of a multicultural view. This course is normally offered in the fall semester.

## 3733 MATHEMATICS FOR PRIMARY STUDENTS

Prerequisites: Admission to Teacher Education;
MATH-2913. Corequisite: Concurrent enrollment in ELEM-3333; ELEM-3632; ELEM-
3832; ELEM-3900P. Candidates will demonstrate their knowledge of numeration and their number sense by creating and presenting lesson plans using manipulatives to teach primary students number concepts and basic problem-solving skills. Content emphasis is placed on teaching the four basic mathematical operations. This course is normally offered in the fall semester.

## 3832 SCIENCE FOR PRIMARY STUDENTS

Prerequisites: Admission to Teacher Education; EDUC-3213
Corequisite: Concurrent enrollment ELEM-3333, ELEM-3632, ELEM-3733; ELEM-3900P. Candidates will gain knowledge about methods, materials, and experiences that enable them to teach with an awareness and understanding of the impact of science in the world of the primary student. The focus is hands-on instruction for the biological, earth, and physical sciences. A school-based experience is incorporated. This course is normally offered in the fall semester.

## 3900P PRIMARY PRACTICUM

Corequisite: Concurrent enrollment ELEM-3333; ELEM-3632; ELEM-3733; ELEM-3832. A primary grade (Pre-K-3) practicum, 60 hours. The focus of the practicum is for the candidate to construct and present lessons in literacy, math, science, and social studies at the primary level. Supervision and assessment of the candidate will be conducted by a university supervisor and the classroom teacher. This course is normally offered in the fall semester.

## 4242 SOCIAL STUDIES FOR INTERMEDIATE STUDENTS

Prerequisites: Admission to Teacher Education; EDUC-3213.
Corequisite: Concurrent enrollment ELEM-4342, ELEM-4433, ELEM-4443; ELEM-4900P. Candidates will develop teaching strategies, including hands-on activities that integrate knowledge and methodology from history and social studies and are appropriate for intermediate classrooms. Emphasis is placed on current thought and practice in socia studies instruction for teaching students to use a wide variety of research sources to create oral, written and pictorial presentations. This course is normally offered in the spring semester.

## 4342 MATHEMATICS FOR INTERMEDIATE STUDENTS

Prerequisites: Admission to Teacher Education; MATH-2913.
Corequisite: Concurrent enrollment ELEM-4242; ELEM-4433; ELEM-4443; ELEM-4900P. Candidates will develop strategies for teaching the construction and exploration of estimation strategies. Content emphasis is placed on teaching concepts of measurement, geometry, algebra, statistics, probability, problem solving, reasoning, and communication of mathematical connections. This course is normally offered in the spring semester.

## 4433 INTERMEDIATE READING

Prerequisites: Admission to Teacher Education; ELEM-3333.
Corequisite: Concurrent enrollment ELEM-4242; ELEM-4342; ELEM-4443; ELEM-4900P.
The focus of this course includes the intermediate stages of literacy elements, including
vocabulary, spelling, fluency, and comprehension. The use of narrative and expository texts will also be addressed. The construction of reading lesson plans for the intermediate grade child, ELL students, student diversity, and reluctant readers will also be addressed. Candidates will be prepared to present reading lessons in Intermediate practicum using data gain from pre testing to construct lesson plans and assess and reflect on gains in student learning. The role of RTI will be reviewed. This course is normally offered in the spring semester.

## 4443 SCIENCE FOR INTERMEDIATE STUDENTS

Prerequisite: Admission to Teacher Education.
Corequisite: Concurrent enrollment ELEM-4433; ELEM-4242; ELEM-4342; 4900P. Candidates will be able to use inductive and deductive strategies involving observation, scientific investigation, interpretation of findings, and communication of results while engaging in hands-on instruction. Biological, earth and physical sciences are viewed as an integrated discipline. A school-based experience is incorporated. This course is normally offered in the spring semester.

## 4544 STRATEGIES FOR READING ASSESSMENT

Prerequisites: Admission to Teacher Education; ELEM-4433.
Practicum: 24 hours (ELEM-4543P).
Candidates will know, understand, and use current thought and practice regarding reading assessment practices and intervention practices such as prescriptive teaching procedures. The candidate will apply the knowledge and understanding gained in the OC Reading Clinic with an individual child. This course is normally offered in the fall semester.

## 4900P INTERMEDIATE PRACTICUM

Concurrent enrollment ELEM-4242; ELEM-4342; ELEM-4433; ELEM-4443.
An intermediate grade (4-5) practicum, 60 hours. The focus of the practicum is for the candidate to construct and present lessons in literacy, math, science, and social studies at the intermediate level. Supervision and assessment of the candidate will be conducted by a university supervisor and the classroom teacher. This course is normally offered in the spring semester.

## ENGINEERING SCIENCE (ENGR)

## 1111 INTRODUCTION TO ENGINEERING

Prerequisite: ACT Math score of 23 or higher or MATH-1213 or MATH-1614. An introduction to careers in engineering and to the engineering programs at OC. Team activities and design projects. Laboratory - 3 hours. This course is normally offered in the fall semester.

## 1113 ENGINEERING MATHEMATICS

Prerequisite: ACT Math score of 23 or equivalent or MATH-1213 or MATH-1614. A survey of the particular areas of mathematics as they apply to the field of engineering. Specific emphasis will be placed on vectors, complex numbers, and matrix methods. Active learning exercises will be utilized throughout the course to demonstrate the utility of the concepts being introduced. Lecture -2 hours. Recitation -2 hours. This course is normally offered in the fall semester.

## 1122 ENGINEERING COMPUTING

Prerequisite: ACT Math score of 23 or higher or MATH-1213 or MATH-1614.
An introduction to software that will be required in the engineering curriculum. Excel,
MathCAD, and MATLAB will be covered. Students will design and build a small system in class which will then be used as the source problem for applying the software tools under study. Laboratory - 6 hours. This course is normally offered every semester.

## 1132 PROCEDURAL PROGRAMMING

Corequisite: ENGR-1113
An introduction to structured programming focusing on algorithm development and implementation. Lecture - 1 hour; Laboratory - 3 hours. This course is normally offered every semester.

## 1242 ENGINEERING FUNDAMENTALS

Prerequisite: ENGR-1122.
Fundamentals of computer, electrical and mechanical engineering design and analysis.
Students will use design principles to complete an electromechanical system. Laboratory 6 hours. This course is normally offered in the spring semester.

## 1252 INTRODUCTION TO SOLID MODELING

Corequisite: ENGR-1113
An introduction to solid modeling, including discussion of the elements required for correct and accurate mechanical drawings. A semester project involving the design and analysis of a component is required. A survey of computer aided design tools is provided. Lecture - 2 hours. This course is normally offered every semester.

## 2113 ECE MATHEMATICS I

Prerequisite: ACT Math score of 23 or higher or MATH-1213 or MATH-1614.
This course covers non-calculus mathematical topics required for Electrical and Computer Engineering majors. Topics include Number Systems, Graph Theory, Series, Discrete Probability, Boolean Algebra, and Computational Modeling. This course explores these mathematical topics with a focus on application in future Electrical and Computer Engineering courses. Lecture - 3 hours. This course is normally offered in the spring semester.

## 2123 ECE MATHEMATICS II

Prerequisite: MATH 2214 and ENGR-2113.
Introduction to probability, random variables, common distribution functions, joint random variables, covariance and correlation. Applications in electrical and computer engineering. Lecture - 3 hours. This course is normally offered in the spring semester.

## 2313 STATICS

Prerequisite: ENGR-1113 with a grade of "C" or better. Corequisite: PHYS-2514.
This class is the first of three courses in the study of mechanics. Statics is the study of
forces applied to structures. An understanding of statics is a prerequisite for studying strength of material and dynamics. Lecture -3 hours. This course is normally offered in the spring semester.

## 2433 THERMODYNAMICS I

Corequisite: PHYS-2614.
An introduction to the analysis of thermal processes, devices and systems.
Thermodynamic properties of pure substances; First and Second Law applications for closed and open systems; power and refrigeration cycle analysis. Lecture - 3 hours. This course is normally offered in the spring semester.

## 2523 DYNAMICS

Prerequisite: ENGR-2313 with a grade of " C " or better and PHYS-2514.
A study of force action related to displacement, velocity, and acceleration of particles and rigid bodies using translation and rotation, work and energy, and impulse and momentum principles. Lecture -3 hours. This course is normally offered in the fall semester.

## 2533 STRENGTH OF MATERIAL

Prerequisite: ENGR-2313.
This class is the second of three courses in the study of mechanics. Strength of materials is the study of stress and strain in structures caused by the application of forces and moments. An understanding of strength and materials is a prerequisite for studying machine design and doing engineering structural design. Lecture -3 hours. This course is normally offered in the fall semester.

## 2544 INTRODUCTION TO DIGITAL SYSTEMS

Prerequisite: ENGR-1242.
Develops a fundamental understanding of combinational and sequential digital circuits and the design of digital systems using various levels of modern IC technology. Lecture - 3 hours; Laboratory -3 hours. This course is normally offered in the fall semester.

## 2614 ELECTRICAL CIRCUIT ANALYSIS

Prerequisite: ENGR-2544.
Introduction of electrical components (inductors, capacitors, resistors) and electronic components [operational amplifiers and the bipolar junction transistor (BJT)] in circuit applications. Network time-domain analysis and first and second-order system response. Lecture -3 hours; Laboratory - 3 hours. This course is normally offered in the spring semester.

## 2623 MECHANICAL ENGINEERING INSTRUMENTATION

Prerequisite: PHYS-2614.
Introduction to mechanical engineering instrumentation and electric circuit analysis. Kirchoff's loop and node laws, operational amplifier circuits, instrument performance characteristics, error analysis, and digital data acquisition systems. Lecture - 2 hours. Lab -3 hours This course is normally offered in the spring semester.

## 2700 CHRISTIAN ENGINEER SEMINAR

Prerequisite: Sophomore standing.
Integration of the Christian faith into engineering professionalism. Topics include integrating professionalism and ethics, faith development, and purposeful service into our lives as engineering students and eventually as engineers. Students will develop and apply a code of ethics based on Christian values and professional standards. Lecture - 1 hour. This course is normally offered in the fall semester.

## 3023 ENGINEERING PROBABILITY AND STATISTICS

Prerequisite: MATH-2214.
Topics in mathematics with direct application to the solving of engineering problems. Discrete statistics and random variables. Lecture - 3 hours. This course is normally offered in the spring semester.

## 3213 ENGINEERING ECONOMICS

Prerequisite: Junior standing.
History, money supply, supply and demand, time value of money, money management, economic measurement, break-even analysis, system analysis, and decision-making in engineering and management. Lecture -3 hours. This course is normally offered every semester.

## 3311 EXPERIMENTAL MECHANICS

Prerequisite: ENGR-2623 and ENGR-2533, Corequisite: ENGR-2523.
An investigation of experimental methods applied to the field of Solid Mechanics. Emphasis will be placed upon collecting, analyzing, and interpreting experimental results to foster critical thinking and upon experimental planning. Laboratory -3 hours. This course is normally offered in the fall semester.

## 4701 SENIOR ENGINEERING SEMINAR

Prerequisite: CENG-4732, ELEC-4732 or MECH-4732.
Preparation for a transition from college to career. Topics include professionalism and ethics, resume and interview preparation, job and graduate school search, and leadership in and contribution to a local congregation. Presentations from potential employers and engineering alumni. Lecture -1 hours. This course is normally offered in the fall semester.

## ENGLISH (ENGL)

## 1113 ENGLISH COMPOSITION I

The first course in college-level writing using contemporary technology. The course emphasizes the composing process, analytical thinking, various types of writing, basic research methods and documentation. Writing includes a journal, a personal essay, a research report, analytical essays and a short research paper sustaining a thesis. Students enrolled in ENGL-1113-English Composition I must make a grade of "C" or better in order to enroll in ENGL-1213-English Composition II. This course is normally offered every semester.

## 1213 ENGLISH COMPOSITION II

Prerequisites: ENGL-1113 with a grade of "C" or better.
The second and final course in the composition series, emphasizing written presentation of academic research supported argument using contemporary technology. Students are taught to read and think critically in analyzing texts and evaluating sources and to communicate their ideas in an appropriate medium and style. This course builds on skills learned in English Composition I, and includes an extensive research project. Students enrolled in ENGL-1213-English Composition II must make a grade of "C" or better in order to enroll in ENGL-2213-Perspectives in Literature. This course is normally offered every semester.

## 1331 TEFL EXPERIENCE I

Supervised private tutoring of non-native English speakers (NNESs). To receive credit, a student will document 30 hours of instruction with a NNES. With advisor approval, as an independent study every semester.

## 2213 PERSPECTIVES IN LITERATURE

Prerequisite: ENGL-1213 with a grade of "C" or better.
This course is an introduction to great literature of the world, focusing on the deepening and broadening of the students' perspectives to help them become thinkers, readers, and writers for life. (CLEP test credit will not be accepted for this course.) This course is normally offered every semester.

## 2223 INTRODUCTION TO WRITING ABOUT LITERATURE

Prerequisite: ENGL-1213 with a grade of "C" or better, English majors only. Does not substitute for Perspectives in Literature.
An introduction to thinking critically and analyzing texts within the field of literature. This course explores primary sources and secondary research related to various genres and time periods of literature from around the world. The course includes both a written and oral presentation. This course is normally offered in the fall semester.

## 2332 TEFL EXPERIENCE II

Introduction to English language teaching through supervised private tutoring of non-native English speakers (NNESs) and interactions with English language teachers (ELTs). To receive credit, a student will observe and interview experienced ELTs, complete an initial job search, and document 30 hours of instruction with a NNES. With advisor approval, this course is available every semester.

## 3013 LITERARY CRITICISM

Prerequisite: ENGL-1213 with a grade of "C" or better.
Non-majors by permission only.
An introduction to critical and theoretical methods with special attention to the elements of literary study and analysis, the major critical documents, and present critical approaches. This course is normally offered in the fall semester of odd numbered years.

## 3023 UTOPIAN/DYSTOPIAN LITERATURE

Prerequisite: ENGL-1213 and ENGL-2223.
This English elective focuses on exploring the shifting defnition of "utopia" in philosophy, literature, and politics through the reading of major utopian texts/film. This course is offered as needed.

## 3123 WORLD LITERATURE I: CLASSICAL TO RENAISSANCE

Prerequisite: ENGL-1213 with a grade of "C" or better.
Non-majors by permission only.
A study of representative world masterpieces through the Sixteenth Century. This course is normally offered in the fall semester of even numbered years.

## 3133 WORLD LITERATURE II: RENAISSANCE TO MODERN

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better. Non-majors by permission only.
A study of representative world masterpieces from the past four centuries. This course is normally offered in the spring semester of odd numbered years.

## 3153 ENGLISH LITERATURE SURVEY I

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better.
Non-majors by permission only.
A study of the major works of English literature from the Danish invasion to the close of the

Sixteenth Century. This course is normally offered in the fall semester of odd numbered years.

## 3253 ENGLISH LITERATURE SURVEY II

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better.
Non-majors by permission only.
A study of the major works of English literature from the late Renaissance through the Romantics. This course is normally offered in the spring semester of even numbered years.

## 3313 INTRODUCTION TO LINGUISTICS

Prerequisite: ENGL-1213 with a grade of "C" or better.
The basic concepts, scope and methodology of the science of language in its descriptive and historical aspects as well as an introduction to the phonemic, morphemic and syntactical features of language. The course also considers the applications of modern linguistics. This course is normally offered in the fall semester of even numbered years.

## 3353 ENGLISH LITERATURE SURVEY III

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of $C$ or better.
Non-majors by permission only.
A study of the major works of English literature from the Victorians to the present. This course is normally offered in the spring semester of odd numbered years.

## 3413 STUDIES IN WORLD LITERATURE

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better.
Non-majors by permission only.
A study of one major genre (fiction, poetry, drama, or film) as it appears in major world texts. The course may be repeated as the content changes. This course is normally offered as needed.

## 3443 BIBLE AS LITERATURE

In this course students will examine the Bible not only as God's inspired word, but also as a literary text. Critiques and analyses from Biblical scholars will be explored. In addition, students will write about their personal interpretations of the Bible. Same as BIBL-3443. This course is normally offered in the spring semester.

## 3493 TECHNICAL WRITING

Prerequisite: ENGL-1213 with a grade of "C" or better.
An introduction to scientific, business and technical writing, including experience in conducting research and writing major types of reports as well as letters and memos. The course also includes basic information regarding graphics and design. This course is normally offered in the fall semester.

## 3523 CREATIVE WRITING I

Prerequisite: ENGL-1213 with a grade of " C " or better.
A study of the theory of creative writing and practice in a workshop setting in the composition of fiction and drama. The course serves as an introduction to the sources of creative writing, the characteristics of the major genres and the process of revising and editing. This course is normally offered in the spring semester of even numbered years.

## 3533 CREATIVE WRITING II

Prerequisites: ENGL-1213 with a grade of "C" or better and ENGL-3523.
An advanced study and practice of the craft of one major genre (poetry). The course is a workshop in practicing the particular features of the genre under study and a study of the process of revising, editing, and marketing manuscripts. This course is normally offered in the spring semester of odd numbered years.

## 3673 AMERICAN LITERATURE SURVEY I, BEFORE 1865

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better. Non-majors by permission only.
A study of early American literature from the writings of the explorers and colonists through
Edgar Allan Poe. This course is normally offered in the fall semester of even numbered years.

## 3713 STRUCTURES OF THE ENGLISH LANGUAGE

Prerequisite: ENGL-1213 with a grade of "C" or better.
An advanced analysis of English grammar, emphasizing constituent structure, instruction to non-native English speakers, and application to writing. This course is normally offered in the fall semseter.

## 3723 METHODS OF TEFL

Prerequisite: ENGL-1213 with a grade of " C " or better.
An introduction to the techniques and methods of teaching English as a second language, including the development of teaching materials and participation in a mini practicum. This course is normally offered in the spring semester of odd numbered years.

## 3773 AMERICAN LITERATURE SURVEY II, 1865-PRESENT

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better. Non-majors by permission only.
A study of the major American authors and literary movements from the postbellum era to the twenty-first century. This course is normally offered in the spring semester of odd numbered years.

## 3803 LITERATURE OF THE PACIFIC RIM

Prerequisite: ENGL-1213 with a grade of "C" or better and ENGL-2223.

A survey of poetry, fiction, and drama of the cultures visited as a part of the Pacific Rim Study Abroad Program. Notes on all readings will be kept in a journal. A major paper will be submitted on a topic related to the readings. (Counts as a core literature course and for a major or minor in English). This course is normally offered every fall in conjunction with the Pacific Rim Program.

## 3813 ADVANCED WRITING

Prerequisite: ENGL-1213 with a grade of "C" or better.
An expansion of writing skills in expository and argumentative modes for both formal and informal contexts. Entails the analysis of rhetorical features of writing such as genre differences and formal argument methods (Classical, Toulmin, Rogerian), the linguistic analysis of style and imitative practices, and the advanced application of the writing process to student cox`mposition. This course is normally offered in the spring semester of even numbered years.

## 4103 MODERN DRAMA

Prerequisite: ENGL-1213 with a grade of "C" or better.
A study of major works, themes, and movements in modern drama. This course is offered as needed.

## 4113 STUDIES IN CHAUCER

Prerequisite: ENGL-1213 with a grade of " C " or better. Non-majors by permission only. Studies in Chaucer surveys the work of the author in the original Middle-English, in particular The Canterbury Tales. Students will develop a knowledge of Middle-English, Chaucer, and the 14th century.

## 4123 THE NOVELS OF JANE AUSTEN

Prerequisite: ENGL-1213 and ENGL-2223.
This English elective surveys Austen's six complete novels. It is a seminar style course that places Austen in her socio-cultural context and in the context of the Rise of the Novel. This course is offered as needed.

## 4133 STUDIES IN TOLKIEN

Prerequisite: ENGL-1213 and ENGL-2223.
This English elective surveys Tolkien's major literary works. It is a seminar style course that places Tolkien in his socio-cultural, theological, and popluar context. This course is offered as needed.

## 4143 FILM AS LITERTURE

Prerequisite: ENGL-1213 and ENGL-2223.
This English elective introduces terminology and conventions of film, analyzes classic film, and focuses on film genres in order to posititon film as a form of literature. It is a seminar style course and requires students to view films out of class. This course is offered as needed.

## 4213 STUDIES IN SHAKESPEARE

Prerequisite: ENGL-1213 with a grade of " C " or better.
Non-majors by permission only.
A thorough analysis of at least 11 of Shakespeare's plays and the major criticism. This course is normally offered in the spring semester odd numbered years.

## 4413 STUDIES IN ENGLISH LITERATURE

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of $C$ or better.
Non-majors by permission only.
A detailed study of a specific genre, movement, or writer in English literature. This course may be repeated as the content is changed. This course is normally offered in the spring semester.

## 4513 STUDIES IN AMERICAN LITERATURE

Prerequisite: ENGL-1213 and ENGL-2223 with a grade of C or better. Non-majors by permission only.
A detailed study of a specific genre, movement, or writer in American literature. This course may be repeated as the content is changed. This course is normally offered in the fall semester.

## 4633 INTERCULTURAL COMMUNICATION I

Prerequisite: ENGL-1213 with a grade of "C" or better
A survey of the basic concepts of how people communicate effectively across cultural boundaries, with special attention given to the complex nature culture plays in communication. ENGL-4633 fosters in students an understanding and appreciation of their own culture and cultural patterns of communication and those of other cultures. Same as COMM-4633, MISS-4633 and SOCI-4633. This course is normally offered in the fall semester of odd numbered years.

## 4643 INTERCULTURAL COMMUNICATION II

Prerequisite: ENGL-1213 with a grade of "C" or better.
Typically taught while a student is living in a foreign culture. Same as MISS-4643 and SOCI-4643.

4713 METHODS OF TEFL II
Prerequisite: ENGL-1213 with a grade of "C" or better.
Survey of methods and philosophies of teaching English as a second language. Attention to Second Language Acquisition research makes this course appropriate for teaching other
foreign languages besides English. This course is normally offered in the spring semester of even numbered years.

## 4733 SENIOR CAPSTONE

Prerequisites: Senior standing and departmental approval.
A capstone course giving Language and Literature majors the opportunity to synthesize previous work, to interact with the faculty at an advanced level, and to practice research skills in preparation for graduate school or for entry into their profession. This course is normally offered every fall semester.

## 4813 SPECIAL STUDIES

Prerequisite: ENGL-1213 with a grade of "C" or better.
Non-majors by permission only.
A detailed study of a specific genre, movement, or writer in literature, of genre writing or rhetoric; of culture, language, or methodology. This course may be repeated as the content is changed. This course is normally offered every semester.

## 4851 PRACTICUM IN WRITING/RESEARCH/EDITING

Prerequisite: ENGL-1213.
Practical experience working with a publisher of books or periodicals (e.g., work with a textbook publisher, Soundings or Christian Chronicle.) This course is normally offered as needed.

## 4863 TEFL STUDENT TEACHING PRACTICUM

Prerequisites: ENGL-3723 and ENGL-4713.
A student teaching experience with non-native English speakers (NNESs). Students complete 30 class hours of teaching NNES. Additionally, students complete a resume and cover letter in reference to a job search for an English language teaching position. This course is normally offered as needed.

## 4873 WRITING INTERNSHIP

Prerequisite: Junior or senior status. Non-majors by permission only. Offered on demand. An independent study focused on developing professional writing abilities through the student's solicitation of writing works at a nonprofit or business. Students must spend a minimum of 30 hours during the semester on exclusively written work in addition to other writing skill development exercises and logs required by the instructor of record.

## 4900 INDEPENDENT STUDY

A reading, research, or writing project related to a student's special interest or need. The course may be taken only by juniors or seniors with approval of the departmental chair and agreement by an English instructor to direct the project. This course is normally offered as needed.

## FAMILY SCIENCE (FMST)

## 1113 INTRODUCTION TO FAMILY SCIENCE

A comprehensive introduction to the subjects which comprise the study of human development and family betterment. It covers, in very general terms, the spectrum from conception to death and takes a general look at professional possibilities within this broad field. The research base of the discipline is introduced as the student learns the difference between research-based and expository publication. Common statistical terms are studied so that the student can read research journals with elementary understanding. This course is normally offered every semester.

## 2423 PARENT-CHILD RELATIONS

Prerequisite: FMST-1113.
Opportunities, responsibilities, and problems faced by parents in guiding the development
of children, with emphasis on recent research in the area of parent-child relationships.
Same as SOCl-2423. This course is normally offered in the spring semester.

## 3003 FAMILY COMMUNICATION AND LEADERSHIP

This course examines theories and research pertaining to communication in the family context. Special emphasis is placed on communication and the development of leadership within the family. Same as COMM-3003.

## 3453 PERSONAL AND FAMILY FINANCE

This course is designed to help individuals and families learn the basics of managing their finances in a Biblical way. Topics covered in this class include: budgeting, investing, insurance, buying your own home, and teaching your children about money. Same as BIBL-3453. This course is normally offered every semester.

## 3513 CHILD WELFARE

Prerequisite: FMST-1113.
A study of child welfare services. Particular attention is given to the areas of foster care, adoption, institutional care, care of unwed mothers, and protective services. This course is normally offered in the spring semester.

## 3523 HUMAN SEXUALITY

Prerequisite: FMST-1113.
An introductory course including considerations of human sexual development. The course is intended to present a decision-making model with which individuals can make decisions and accept responsibility for their actions. This course is normally offered in the fall semester.

## 3533 FAMILY LIFE EDUCATION

## Prerequisite: FMST-1113

This course is designed to provide students with an applied learning experience in the design, development, and implementation of programs geared toward helping children and families. Areas of emphasis include program planning, theory, evaluation, mass media communication, and principles of teaching/instruction. This course is normally offered in the spring semester.

## 3613 ADOLESCENCE AND EARLY ADULTHOOD

Prerequisite: PSYC-1113.
This course covers the developmental process of adolescence and early adulthood. The course focuses on biological, cognitive, and socio-emotional issues as they pertain to the ongoing changes in this time of the life cycle. Attention will be given to issues of gender, culture, family relationships, peer relationships, sexuality, and education. Special attention will also be given to issues that young adults face as they venture into collegiate life, career exploration, and new family roles. Same as PSYC-3613. This course is normally offered in the fall semester of odd numbered years.

## 3723 GERONTOLOGY

Prerequisite: FMST-1113.
A study to include physical and health factors in aging; psychological aspects of aging; marriage, family, and community relationships of older persons; economic and vocational factors in aging; perspectives on death, dying, and grief; aging and institutional care; aging and the law; and the future of social intervention, both public and private. Same as PSYC3723 and SOCI-3723. This course is normally offered every other spring semester.

## 3913 FAMILY DEVELOPMENT

Prerequisite: FMST-1113
An introduction to the family development life cycle. The course will focus on the stages that marriages and families progress through and the associated tasks that need to be addressed and successfully negotiated. Attention will be given to dating, marriage, having children, children going to school, adolescence, empty nest, and issues of caretaking, grandparenting and aging. The course will also explore the related crises that develop around these developmental transition periods. This course is normally offered in the fall semester.

## 3933 CYBERNETICS AND SYSTEMS THEORY

Prerequisite: FMST-1113.
An introduction to the major underlying theoretical foundations of family therapy. The course will explore the historical development of systems theory and cybernetics from its origins in the 1940s in the thinking of mathematicians, physicists, biologists, and engineers to the pioneering work of Bateson and his colleagues in the late '50s and their application of cybernetics to the family. The course will also introduce the work of Murray Bowen. The basic concepts of systems theory will be discussed and contrasted with the more common Western, analytical approach which has dominated the thinking in psychology since the time of Freud. Same as PSYC-3933. This course is normally offered in the fall semester of odd numbered years.

## 4123 DIVORCE AND STEPFAMILY RELATIONSHIPS

Prerequisite: FMST-1113.
An overview of the issues pertaining to divorce and stepfamily relationships. We will address the consequences of divorce on children and adults as well as ways in which adults can create a more healthy post-divorce environment for their children. We will consider the major issues surrounding stepfamilies in today's society and how healthy relationships can be established in these environments. This course is normally offered in the fall semester.

## 4323 INTRODUCTION TO MARITAL AND FAMILY THERAPY

Prerequisite: FMST-1113.
An introduction to the field of marital and family therapy. It will present the history of systems therapy, including the importance of systems theory to the continuing development of the discipline. Special emphasis will be placed on the current status of marital and family therapy including the importance of constructivist theories. The course will also present the major theories of marital and family therapy that have defined the field for the last 40 years. This will be a systemic, experiential, discussion-based class that will require active participation from each student. Same as PSYC-4323. This course is normally offered in the spring semester of even numbered years.

## 4333 FAMILY RESILIENCE

Prerequisite: FMST-1113.
Examination of selected theoretical approaches; areas of family risk; protective factors; individual and family qualities relating to resilience; prevention and intervention strategies ground in resilience perspectives. This course is based on the premise that Family Science majors can work more effectively with families by (a) defining and understanding the processes of family risk and resilience; (b) understanding and applying different theoretical models to specific risk and resilience issues; (c) understanding and applying existing scholarship on family risk and resilience and; (d) evaluating/generating possible preventions and interventions for families grounded in resilience perspectives. This course is normally offered in the spring of odd numbered years.

## 4653 RESEARCH SEMINAR

Prerequisites: FMST-1113 and PSYC-4623.
The capstone course in the Family Science program. Students will learn SPSS - the Statistical Package for the Social Sciences - and complete their own individual research project and paper, including the collection and analysis of data. The final goal will be
making a presentation of their findings to the appropriate student convention. Much of the class will consist of individual instruction and laboratory work. Same as PSYC-4653.
This course is normally offered in the spring semester.

## 4713 FAMILY SCIENCE PRACTICUM

Prerequisite: FMST-1113.
A practicum that is a self-selected experience from among approved settings within the areas of child development or gerontology. Commercial infant or child care, child abuse facilities, Department of Human Services facilities, retirement or assisted living facilities are possible acceptable settings. A total of 126 clock hours ( 9 hours per week) during a semester is required. This course Is offered as needed.

4733 PROFESSIONAL, ETHICAL, AND LEGAL ISSUES
Prerequisites: FMST-1113 and senior standing.
A study of the contemporary ethical considerations, legal standards, and professional issues that influence the work of psychologists, counselors, and other mental health officials. Specific attention will be given to the Ethical Standards of the APA, ACA, and AAMFT, as well as Oklahoma State Law governing the behavior of researchers and psychotherapists. The course will focus on specific ethical dilemmas throughout the class, including - among others - confidentiality, dual relationships, professional relationships, assessment, and research. Same as PSYC-4733. This course is normally offered in the fall semester of odd numbered years.

## 4900 INDEPENDENT STUDY IN FAMILY SCIENCE

Prerequisite: FMST-1113.
Provides mature students an opportunity for individual research and guided readings. (1-3 hours) This course is offered as needed

## FINANCE (FINC)

## 3313 PRINCIPLES OF FINANCE

Prerequisites: ECON-2113, ACCT-2213.
A study of the objectives and techniques of the finance function of the firm. Financial ratios, cash budgets, break-even analysis, leverage, quantitative tools, security evaluation, cost of capital, capital budgeting, working capital management, sources of capital for expansion and evaluation of the capital structure are studied. This course is normally offered every semester.

## 3513 MONEY AND BANKING

Prerequisites: ECON-2213.
A study of the nature, history, and functions of money and monetary institutions. Particular attention is given to the central banking system, the Federal Reserve System, free enterprise, government controls, the money supply, foreign exchange, and the interrelationships between monetary theory and the theories of prices and unemployment. This course Is normally offered in the fall semester.

## 3613 INVESTMENTS

Prerequisite: FINC-3313.
A practical study of securities and securities markets. The development of the models for the valuation of stocks and bonds as well as alternative investments such as options, warrants, convertible securities, futures, mutual funds, and puts and calls. This course is normally offered in the spring semester.

## 3813 PERSONAL FINANCE

Prerequisites: FINC-3313
An analysis of financial management for individuals and families. Areas covered include financial planning and budgeting, financial products and services, and risk management. This course is normally offered as needed.

## 4113 ADVANCED FINANCIAL MANAGEMENT

Prerequisite: FINC-3313.
A continuation of the basic financial management course. The course involves an in-depth study of the theories and practices related to the financial administration of the firm. Areas covered include valuation model, risk analysis, capital budgeting, capital structure and dividend policy, long term financing decisions, and asset management. This course is normally offered in the fall semester.

## 4123 INTERNATIONAL FINANCE

Prerequisites: Junior Standing
Analyzes financial problems corporations face that result from operating in an international environment. Major topics covered are corporate strategy and the decision to invest abroad, forecasting exchange rates, international portfolio diversification, managing exchange risk, exposure management, cost of capital and financial structure in the multinational firm, and sources of financing. Same as INTL-4123. This course is normally offered in the spring semester.

## 4313 FINANCIAL MARKETS AND INSTITUTIONS

Prerequisite: FINC-3313.
An analysis of financial markets and institutions. Areas covered include non-bank financial institutions, the nature and importance of various financial markets, and global issues with international markets and institutions. This course is normally offered in the spring semester.

## 4513 TOPICS IN FINANCE

Prerequisites: FINC-3513
The capstone course for finance. In addition to emphasizing portfolio management and international finance, the course covers the most current topics of investment finance. This course is normally offered as needed.

## 4613 FINANCIAL MODELING

Prerequisites: FINC-3313
Financial data analytics used for analysis and projection. This analysis and projection will come from computer generated and software assisted systems. FINC 3313 is a prerequisite for this course. This course is normally offered in the spring semester.

## 4713 PRINCIPLES OF INSURANCE

Prerequisites: FINC-3313.
Comprehensive study of insurance and third party transfer of risk. This course is normally offered in the fall semester.

## 4900 INDEPENDENT STUDY IN FINANCE

Prerequisites: Instructor and Dean approval.
Assigned readings, reports and research projects based on the needs of the student.
( $1-3$ hours) This course is offered as needed.

## 4990 INTERNSHIP IN FINANCE

Prerequisites: Admission to College of Business Administration Upper Division, completion of FINC-3313 and approval of advisor and dean.
Supervised and approved finance business internship with firm or organization; written and oral reports are required along with employer evaluation. (Variable credit, 1-3 semester hours; 30 hours work required for each hour of credit with a maximum of 3 credit hours.) This course is offered as needed.

## FINE ARTS (FINE)

## 2903 AESTHETICS

A field study of the great art, architecture, music, and drama of Study Abroad destinations. By permission only. This course is normally offered on a study abroad program.

## FRENCH (FRNC)

## 1113 BASIC FRENCH

Basic principles and practice of speaking, understanding, reading and writing French and an introduction to French culture for those with no background in French. This course is normally offered in the fall semester.

## 1213 BASIC FRENCH II

Prerequisite: FRNC-1113, one year of French in high school or the equivalent with permission of the instructor. This course is normally offered in the spring semester.
Continuation of Basic French I, enabling the student to read, write, understand and respond in basic French and to be aware of cultural differences. This course is offered as needed.

## GENERAL SCIENCE (GNSC)

## 1711 FRESHMAN SCIENCE SEMINAR

Prerequisite: Must be a natural science major.
A seminar course for all freshman natural science majors that introduces them to careers in science and teaches them about the academic catalog and the latest scientific literature. Students are required to design their own personalized four-year science degree plan that includes pre-requisite courses they need based on their career goals. 2 hours per week
This course is normally offered in the fall semester.

## 2133 GENERAL PHYSICAL SCIENCE

A survey course including basic physics, chemistry, astronomy, and the philosophy of science. Hands-on laboratory exercises are integrated into the course. 4 hours per week. This course is normally offered every fall semester.

## 2313 EARTH SCIENCE

An introduction to the study of the Earth, emphasizing processes that shape and change the surface. This course studies the lithosphere, hydrosphere, and atmosphere, including effects of pollution and remediation efforts. Hands-on laboratory exercises are integrated into the course. 4 hours per week. This course Is normally offered every semester.

## 2323 ASTRONOMYI

This course explores the fundamental concepts of astronomy, including historical
perspectives as well as current interpretation of celestial phenomena. Includes comparison of other planets with the Earth, and examines stars, stellar life cycles, galaxies, and cosmology. Hands-on laboratory exercises are integrated into the course. 4 hours per week. This course is normally offered every semester and summer.

## 2333 ASTRONOMY II

Prerequisite: GNSC-2323: General Astronomy I
A sequel to General Astronomy I, studying the instrumentation and techniques used to gather quality scientific data. The student will take a "hands on" role in using the telescopes and cameras in the university's observatory. The course is primarily lab based with
astrophotography and photometry projects. 4 hours per week. This course is normally offered every spring semester.

## 2711 SOPHOMORE SCIENCE SEMINAR

Prerequisite: Must be a natural science major and GNSC-1711 and CHEM-3115 with a grade of "C" or better
A seminar course that instructs students how to critically read, analyze, and interpret data from the latest scientific research papers in a small group/journal club-style format. Students will design a degree and career plan portfolio to be presented to a panel of science faculty during an individual assessment review. 2 hours per week. This course is normally offered in the spring semester.

## 3113 FORENSIC SCIENCE AND THE LAW

A course exploring the application of various laws and rules of evidence to the forensic sciences and how the admission of evidence derived from forensic sciences can impact the administration of justice in the United States. What forensic scientists testify to and how their sciences conform to the "Rules of Evidence" will be discussed. Lecture-3 hours. This course is normally offered in the fall semester of even numbered years.

## 3711 JUNIOR SCIENCE SEMINAR

Prerequisite: Must be a natural science major and GNSC-2711.
A seminar that emphasizes proper experimental design and analysis, scientific writing, and scientific presentations. 2 hours per week. This course is normally offered in the fall semester.

## 4712 SENIOR SCIENCE SEMINAR

Prerequisite: Must be a natural science major and GNSC-3711.
A seminar course requiring students to do extensive scientific research on one recently published scientific paper. Students will write a senior paper over their research and complete an oral presentation of their work to science majors. Seniors will also read and analyze papers presented by other seniors and write critical analyses of assigned figures 2 hours per week. This course is normally offered every semester.

## 4721 SCIENCE MODELING AND STRATEGIES

Prerequisites: Junior or Senior level, science education major
The course is designed to fulfill NSTA requirements for secondary science education majors. During this course, each student will complete a science portfolio based on competency based artifacts as proof of concept mastery. This portfolio consists of five different modules and sixteen assignments, each addressing a specific NSTA standard. Student teaching may not be started until the student has successfully completed this course. This course is normally offered in the fall semester.

## 4850 SCIENCE SERVICE LEARNING

Provides an opportunity for learning in a service environment. Students select a service project and work with a faculty mentor to develop the academic background, assignments, and reflection to create a unique learning opportunity. One hour of class time each week will be devoted to meeting with mentors and other students to discuss the project. Variable credit (1-t3 hours) will be given based on the number of service hours and academic responsibilities. This course is offered as needed.

## GEOGRAPHY (GEOG)

## 2113 ELEMENTS OF HUMAN GEOGRAPHY

A study of the relationship between humankind and the environment and the effect of that relationship on political, cultural, economic, and religious institutions. This course is normally offered in the fall semester in even numbered years.

## 2213 WORLD REGIONAL GEOGRAPHY

An interpretive study of the political map of the world and some of its recent changes. Attention is focused on the role of location, physical environment, population, ethnic groups, natural resources, and technological change in the evolution of nation-states and dependent territories. This course is normally offered in the fall semester of odd numbered years.

## 2513 HUMAN GEOGRAPHY OF THE PACIFIC RIM

Prerequisite: Acceptance to the Asian Studies Program.
This course will focus on the cultures-sociological, geographical, political, and religiousthat contribute to the emergence of the present situations in the Pacific Rim countries. The students will study the historical development of a dominate culture apart from the west, the main architects of that development and the blending of this area to the world arena. The class will be assisted by lectures from area specialists in the countries visited, visual sources, primary and secondary sources, and hands-on learning via tour sites. This course is designed to take advantage of the travel opportunities afforded by your study abroad experience. This course is normally offered in the summer on the Asian Studies Program.

## 4900 INDEPENDENT STUDY IN GEOGRAPHY

Provides mature students an opportunity for individual research and guided readings (1-3 hours). This course Is offered as needed.

## GERMAN (GERM)

## 1113 BASIC GERMAN

Basic principles and practice of speaking, understanding, reading, and writing German and an introduction to German culture for those with no background in German. This course is
designed for students participating in the European Studies program. This course Is offered as needed.

## 1213 BASIC GERMAN II

Prerequisite: GERM-1113, one year of German in high school or the equivalent with permission of the instructor. Continuation of Basic German I, enabling the student to read, write, understand, and respond in basic German and to be aware of cultural differences. This course is offered as needed.

## GREEK (GREK)

## 1113 ELEMENTARY GREEK I

An introductory course in the elements of Koine Greek. Particular attention is given to learning vocabulary and to learning to recognize grammatical forms. This course is normally offered in the fall semester.

## 1213 ELEMENTARY GREEK II

Prerequisite: GREK-1113.
A continuation of GREK-1113 with selected readings from the New Testament. This course is normally offered in the spring semester.

## 2113 INTERMEDIATE GREEK I

Prerequisite: GREK-1213.
Designed to give the student who has completed courses in elementary Greek essential linguistic knowledge and skill for exegetical work in the Greek New Testament. This course is normally offered in the fall semester.

## 2213 INTERMEDIATE GREEK II

Prerequisite: GREK-2113.
A continuation of GREK-2113 with more detailed and inductive study of New Testament
Greek. This course is normally offered in the spring semester.

## 3113 ADVANCED GREEK READINGS I

## Prerequisite: GREK-2213.

Readings from various New Testament documents with concentration on syntactical relations between words, word groups, and clauses.

## 3213 ADVANCED GREEK READINGS II

Prerequisite: GREK-3113.
Readings from various New Testament documents, a formal exegesis, and special word studies. This course is normally offered in the spring semester.

## 4900 INDEPENDENT STUDY IN ADVANCED GREEK GRAMMAR

Assigned readings and reports or projects based on the needs of the individual student. Normally taken only by rs or seniors with approval of the dean of the college (1-3 hours). This course is offered as needed.

## HEBREW (HBRW)

## 1113 ELEMENTARY HEBREW I

An introductory course in the principles of biblical Hebrew with special emphasis on verbal forms. This course is normally offered in the fall semester.

## 1213 ELEMENTARY HEBREW II

## Prerequisite: HBRW-3113.

A continuation of HBRW-3113. This course will include readings in Hebrew narratives and an introduction to textual criticism and Hebrew exegesis. This course is normally offered in the spring semester.

## 2113 INTERMEDIATE HEBREW

Pre-requisite: HBRW-1213
An intermediate course in the principles of Biblical Hebrew with special emphasis on reading and dating of narrative texts. This course is normally offered in the fall semester.

## 2213 INTERMEDIATE HEBREW II

Pre-requisite: HBRW-1213
An intermediate course in the principles of Biblical Hebrew with a focus on Biblical Hebrew poetry. This course is normally offered in the spring semester.

## 3113 ADVANCED HEBREW I

Pre-requisite: HBRW-2213
An advanced course in the principles of Biblical Hebrew that includes an introduction to Biblical Aramaic. This course is normally offered in the fall semester.

## 3213 ADVANCED HEBREW II

Pre-requisite: HBRW-2213
An advanced course in the principles of Biblical Hebrew that introduces the student to the reading of unpointed Hebrew texts spanning from the iron age to the rabbinic period. This course is normally offered in the fall semester.

## HISTORY (HIST)

## 1223 TURNING POINTS IN U.S. HISTORY

A survey of the major trends, conflicts and crises of American history from the age of discovery to the present. Special attention will be paid to such topics as the settlement of the United States, the American Revolution, the Age of the Common Man, the Civil War Era, the Age of Industrialization and Urbanization, American foreign policy and the Cold War, the Civil Rights Movement, the decade of the sixties and the cultural wars. This course is normally offered every semester.

## 2111 EXPLORING AMERICA

Prerequisites: completion of HIST-1223 or HIST-2213 and permission of instructor. This history travel course will take students to various historical sites, museums, monuments, and living history exhibits, enabling them to see where history was made and how it has been preserved and presented. Regular class meetings and assignments during the spring semester prepare students to maximize their learning on the 7-10 day travel experience. Destinations and trip themes change each year so the course may be repeated for credit. This course is normally offered in the spring semester. The travel component starts at the end of the semester.

## 2123 INTRODUCTION TO HISTORICAL RESEARCH

An introduction to historical research, analysis and writing, emphasizing the complex nature and philosophy of history, the history of historical writing, and the role of Christian historians. This course is normally offered in the spring semester.

2213 HISTORY OF THE U.S. TO 1877
A survey of America's political, social, religious, intellectual, diplomatic, and economic history from its founding through Reconstruction. This course is normally offered every fall semester.

## 2223 HISTORY OF THE U.S. SINCE 1877

A survey of America's political, social, religious, intellectual, diplomatic, and economic history from the end of Reconstruction to the present. This course is normally offered in the spring semester.

## 2313 OKLAHOMA HISTORY

A study of the exploration of Oklahoma, coming of civilized tribes, opening of Indian lands to settlement by non-Indians, statehood, constitution and government, and economic and political developments. This course is offered in the spring semester of odd numbered years.

## 2513 ENGLISH HISTORY TO 1603

A survey of English history from the Roman Conquest to the death of Elizabeth I, with emphasis on the creation of the national state and its constitutional evolution. Economic and social developments and relations with other parts of the British Isles also receive attention. This course is offered as needed.

## 2523 ENGLISH HISTORY SINCE 1603

A survey of English history from the accession of James I to the present. In addition to the themes emphasized in the first half of this survey, the rise and the decline of the British Empire are studied. This course is offered as needed.

## 2613 THE MODERN MIDDLE EAST

A historical and cultural study of the modern Middle East, focusing on Islamic culture, nationalism, secularization, and the challenge of Westernization. Key topics include the rise and fall of the Ottoman Empire, the establishment of Saudi Arabia, the Israeli-Palestinian conflict, the Iranian Revolution, the Persian Gulf Wars, and the rise of political terrorism. This course is normally offered in the spring semester of even numbered years.

## 2723 INTRODUCTION TO PUBLIC HISTORY

Introduction to theories regarding various fields of public history, the historical traditions of such fields, and the relationship between public history and the history profession. The course will introduce students to various public history fields including museum studies, archives, historic preservation, heritage tourism, media, oral history, and cultural resource management. Field trips to area museums, archival depositories, and research centers will be included. This course is normally offered in the fall semester of even numbered years.

## 2813 DATA ANALYSIS

Prerequisite: POLS-2113 or POLS-2213.
Survey of methods and approaches to the study of politics and their underlying assumptions as they apply to the major concepts of the discipline. An introduction to political data sources, their stregnths and weaknesses, and uses in research. The course is normally offered in the spring semseter of odd numbered years.

## 2903 STUDIES IN EUROPEAN CIVILIZATION

A systematic study of Western civilization beginning with ancient Greece and ending with the emerging European community. Students visit major European capitals as part of the field experience on the European Studies Program. This course is normally offered every semester.

## 2923 PERSPECTIVES IN WESTERN CIVILIZATION

Prerequisite: Sophomore standing.

An examination of the political, economic, social, cultural, and religious developments of Western civilization. This course is normally offered every semester.

## 3113 AMERICAN WESTERN FRONTIER

A historical study of the western United States from the time of Spanish settlement to the present, focusing on interactions between Europeans and native inhabitants, American western expansion, and the importance of the western American folk culture. Key topics include Spanish conquistadores and missions, the Louisiana Purchase, the Oregon Trail, the Mexican-American War, Indian Wars, and the West in popular culture. This course is normally offered in the fall semester of even numbered years.

## 3213 AMERICAN POLITICAL THOUGHT

Prerequisite: POLS-2113 or POLS-2213.
A study of American political ideas, political thinkers, and the classic texts of American political thought from colonial times to the present in their historical context. Special attention will be given to the influence of Calvinism, the Enlightenment, Romanticism,
Social Darwinism, pragmatism, Anti-Communism, postmodernism, and contemporary
liberalism and conservatism. Same as POLS-3213. This course is normally offered in the fall semester of even-numbered years.

## 3313 COLONIAL AMERICA, 1492-1763

This course focuses on the creation and development of European colonies in the New World, especially in North America, from the European discovery of America to the end of the French and Indian War. It compares and contrasts the cultures of the major European colonial powers and those of Native Americans. Key topics include European exploration and conquest, the everyday lives of colonists, their interactions with Native Americans, the development and spread of slavery, political and economic development, religious diversity and creativity, and colonial wars. This course is normally offered in the spring semester of odd numbered years.

## 3423 AMERICAN INDIAN HISTORY

History of American Indians in what is now the United States from pre-Columbian times to the present, exploring the cultural diversity among American Indians, tribal sovereignty, conflicts and accommodations with European Americans, and historical roots of contemporary Native American issues. This course is normally offered in the spring semester of odd numbered years.

## 3563 NINETEENTH CENTURY EUROPE, 1789-1890

An examination of the social, economic, and political history of Europe from 1789 to the passing of Bismarck. Special emphasis is placed upon the French and Industrial Revolutions and their long-range effects. This course is normally offered every fifth semester.

## 3583 TWENTIETH CENTURY EUROPE, 1890-PRESENT

A study of the twentieth century and its dramatic developments, focusing especially on the challenges to liberalism embodied in the world wars, fascism, communism, and the Cold War. This course is normally offered every fifth semester.

## 3713 AMERICAN RELIGIOUS HISTORY

A historical study of religion in America from the point of European contact to the present, with an emphasis on religious pluralism, church-state relations, theology, and cultural accommodation. Key topics include Puritanism, the Great Awakenings, evangelicalism, Catholicism, Mormonism, the Restoration Movement, the Social Gospel, Fundamentalism, and world religions in America. This course is normally offered in the spring semester of odd numbered years.

## 3913 RENAISSANCE AND REFORMATION, 1300-1648

An examination of the cultural developments which appeared first in Italy and then spread to Northern Europe. The course includes a brief survey of the Protestant revolt and its political ramifications. This course is normally offered every fifth semester.

4013 REVOLUTIONARY AND EARLY NATIONAL AMERICA, 1763-1815
A study of the creation and development of the American republic from the end of the French and Indian War through the War of 1812 with an emphasis on politics and political thought, diplomacy, and religious and cultural developments. Particular attention will be paid to the emergence of American culture and nationalism, dissent and revolution, the Confederation and Constitution, the development of political parties, westward expansion, the War of 1812, and the personalities, politics, and religious beliefs of the founding generation. This course is normally offered in the fall semester of odd numbered years.

## 4113 JACKSONIAN AMERICA, 1815-1850

An examination of the political, economic, social, and cultural developments of the United States from the end of the War of 1812 through the 1840s with emphasis on the rise of Jacksonian democracy, religious revivals and innovations, revolutions in transportation, communications and market economics, the emergence of American nationalism, the bases for sectionalism, and America's westward expansion. Key topics include Jacksonian politics, the Second Party System, Indian removal, manifest destiny, the Second Great Awakening, and the Mexican-American War. This course is normally offered in the spring semester of even numbered years.

## 4313 THE GILDED AGE AND PROGRESSIVE ERA, 1877-1914

A study of the aftermath of Reconstruction, the occupation of the trans-Mississippi West, the revolutions in communications, agriculture, and industry, and their relation to political and social developments, the tariff, movements for reform, foreign relations, and the
progressive movement. This course is normally offered in the spring semester of even numbered years.

## 4343 AMERICA IN THE ERA OF THE WORLD WARS, 1914-1945

A study which focuses on the home front during this turbulent period. Topics covered include the impact of the wars on society, the economic collapse of the nation, the transition from an agrarian society to a dominant urban culture, the revolution in thought and morals, and the growing rumblings of discontent from women and minorities. This course is normally offered in the fall semester of odd numbered years.

## 4353 U.S. HISTORY SINCE 1945

A study of America's political, diplomatic, social, economic, and cultural history since the end of WWII, focusing on the Cold War, McCarthyism, the expansion of civil rights, the Vietnam War, student protests, the Persian Gulf Wars, and popular culture. This course is normally offered in the spring semester of even numbered years.

## 4523 HISTORY OF ROME

A study of Rome from founding to fall, with special attention to the nature of Roman imperialism, culture, politics, and the roles of Jews and Christians in the Empire. This course Is normally offered every fifth semester.

## 4613 MEDIEVAL EUROPE, 400-1300

A detailed study of the political, economic, and social history of Europe from the decline of the Roman Empire up to late Middle Ages, with special attention to key institutions which have shaped the modern world. This course is normally offered every fifth semester.

## 4723 CIVIL WAR AND RECONSTRUCTION

A study of the social, economic, and political factors leading to the Civil War, 1861-1865, and the results of the conflict. This course is normally offered in the fall semester of even numbered years.

## 4733 SENIOR HISTORY SEMINAR

Prerequisites: Senior standing and grade of " C " or better in HIST-2123.
A capstone seminar giving history majors the opportunity to further develop their craft as historians and explore in depth a historical question that has interested them. Students interact with the faculty at an advanced level, produce a historical project and practice research skills in preparation for graduate school or for entry into their professions. This course is normally offered in the fall semester.

## 4810 SPECIAL STUDIES

Content varies. Course may be repeated ( $1-3$ hours). This course offered as needed.

## 4900 INDEPENDENT STUDY IN HISTORY

Provides mature students an opportunity for individual research and guided readings. (1-3 hours) This course offered as needed.

## HONORS PROGRAM (HONR)

## THE PREREQUISITE FOR ALL HONORS COURSES IS ADMISSION TO THE HONORS PROGRAM.

## 1010, 1020 SYMPOSIUM

Content changes each semester, but the course focuses on current issues or concerns related to other courses in the program. 1010 is normally offered in the fall semester and 1020 is normally offered in the spring semester.

1114 WESTERN THOUGHT AND EXPRESSION THROUGH THE RENAISSANCE An interdisciplinary analysis of the confluent events and expressions - historical, political, religious, philosophical, artistic, scientific, and mathematical - that have shaped Western thought, values, and culture through the Renaissance. In particular, the course focuses on those aspects of early Western civilization that have directly influenced our current thinking and culture. This course is normally offered in the fall semester.

## 1124 WESTERN THOUGHT AND EXPRESSION SINCE THE RENAISSANCE

An interdisciplinary analysis of the confluent events and expressions - historical, political, religious, philosophical, artistic, scientific, and mathematical - that have shaped Western thought, values, and culture since the Renaissance. The course focuses on the rise of individualism, new scientific discoveries, and the globalization of economies and war. Topics include the effect of each of these elements on our current American cultural and political realities. This course is normally offered in the spring semester.

## 1214 THE BIBLE AND CLASSICAL LITERATURE

A careful study of key biblical texts and the worldview they teach juxtaposed with a study of classical texts from the ancient Greek and Roman civilizations. Students study the similarities of theme and artistic form between the two types of text and analyze the different responses they offer to our human condition and needs. This course is normally offered in the fall semester.

## 1224 THE BIBLE, SCIENCE, AND HUMAN VALUES

A study of biblical teachings concerning the nature of human beings and order in God's universe compared and contrasted with specific discoveries and philosophies of science after the Renaissance. The course focuses on the specific ways in which the Bible and science interacted to produce many of the human values common to contemporary

## 2010, 2020 SYMPOSIUM

Content changes each semester, but course focuses on current issues or concerns related to other courses in the program. 2010 is normally offered in the fall semester and 2020 is normally offered in the spring semester

## 2113 THE QUEST FOR MEANING: CHRIST AND THE GOOD LIFE

A course based on the supposition that Jesus Christ provides the best solution to persistent puzzles of life: "Why am I here?" "What is worth doing?" "How can I live a good life?"
"Where am I going?" To see Jesus' answers in context, students investigate His life and teachings and note conflicts and conjunctions between His revelation and other views of the good life which have been significant for our culture. This course is normally offered in the fall semester.

## 2123 THE QUEST FOR IDENTITY: RACE, CLASS, AND GENDER IN AMERICAN THOUGHT

A study of American authors and texts in the nineteenth and twentieth centuries that have contributed in a significant way to our current understanding of American identity. Particular attention will be given to the conflict in our society between individualism and the community and how the conflict has influenced our current understanding of race, class, and gender. This course is normally offered in the spring semester.

## 3111, 3121, 4111 HONORS SYMPOSIUM

An Honors symposium led by experts from various disciplines on topics specific to their respective areas of study and/or research. The purpose of the symposium is to encourage honors students to think critically and broadly, to communicate effectively, and to make application of the knowledge specific to their fields of study. One of these courses is normally offered every semester.

## 4113 HONORS INTERNATIONAL EXPERIENCE

Honors students are encouraged to study abroad as a way to integrate and enrich the Honors core curriculum. To gain this credit, student may participate in any of Oklahoma Christian's academic study abroad programs that are six weeks or longer. CCCU and other study programs may count if approved by the honors director. Typically, to be approved, programs must be academic and involve at least six weeks of travel living outside the U.S. and Canada. (Typically honors students use this course to receive credit for one of the two required study abroad courses: HIST-2903-Studies in European Civilization, HIST-3143Human Geography of Pacific Rim).

## 4121 SENIOR HONORS SEMINAR

Honors research project, thesis, or extensive service project designed and completed by the honors student with the approval of the Director of the Honors Program and under the guidance of an OC faculty member. This course is normally offered every semester.

## INFORMATION SYSTEMS (INFO)

## 3113 PRINCIPLES OF ELECTRONIC BUSINESS

A comprehensive study of the organizational needs for information and the conceptual, technological, and practical foundations of information systems in order to build an understanding of the value of information systems for business operations, management decision making, and strategic advantage. An introduction to the concepts of electronic business as facilitated by the Internet, World Wide Web, and related technologies. The topics covered include an understanding of the catalysts for e-business (business-tobusiness and business-to-customer), convergence of technologies and capabilities, technological challenges, Web design, behavior and educational challenges, organizational and business barriers, and strategies for e-business. This course is normally offered every semester.

## 3613 MANAGEMENT INFORMATION SYSTEMS

A study of the conceptual and practical foundations of information processing support for management decision making and control functions. This course is normally offered in the fall semester.

## 4900 INDEPENDENT STUDY IN INFORMATION SYSTEMS

Prerequisites: Junior or Senior standing and approval of the dean of the college.
(1-3 hours).
Assigned readings, reports, research projects, and system development projects based on the needs of the student. A maximum of 3 hours may be counted toward the major. This course is normally offered as needed.

## INTERNATIONAL STUDIES (INTL)

## 3123 INTERNATIONAL BUSINESS EXPERIENCE

During this course, students participate in an experience that immerses them for at least one week in the international business environment of a country or countries paying particular attention to the methods, practices, and challenges of conducting business in an international environment. Course requirements include attending pre-trip seminars and completing all course assignments after the conclusion of the travel experience. This course is normally offered as needed.

## 3313 INTERNATIONAL BUSINESS

Prerequisites: ECON-2113.
An overview of the world of international business. This class examines the environment and management of international business, stressing the effects of the foreign exchange markets, capital markets, and international financial and economic organizations upon managerial functions such as exporting and importing, foreign investment, marketing, personnel, accounting, and finance. This course is normally offered every semester.

## 4123 INTERNATIONAL FINANCE

Prerequisite: Junior Standing.
Examines all the factors affecting the determination and fluctuation of exchange rates and the forecasting of those exchange rates. Studies the principles around currency hedging to protect profits when conducting business on an international level. Also, addresses the accounting and financial principles surrounding international mergers and acquisitions and capital budgeting decisions. Same as FINC-4123. This course is normally offered in the spring semester.

## 4413 INTERNATIONAL MANAGEMENT

International management is an analysis of cultural impacts on international management and international business. Along with information technology, international management is the major challenge facing organizations entering the new millennium. All countries and companies are now part of the super-competitive global marketplace. Emphasis is placed on the emerging role of the global manager as a cosmopolitan, communicator, negotiator, creator of synergy, and change leader. Seven major world regions - North America, Latin America, Asia, Europe, Middle East, India, and Africa - are discussed for matters of cultural specifics. This course will provide a balanced approach to International Management by discussing international environment, culture, strategy and functions, and organizational behavior, and human resource management. Same as MGMT-4413. This course is normally offered in the fall semester.

## 4723 GLOBAL MARKETING

This course discusses the marketing of goods, services, and ideas in the context of a multinational environment. Same as MKTG-4723. This course is normally offered in the spring semester.

## 4743 INTERNATIONAL SOCIAL ENTREPRENEURSHIP

A study and application of the consulting process using social-entrepreneurial tools to address problems in developing nations. Topics addressed include: poverty, "when helping hurts", microfinance, access to capital, problems with aid, social entrepreneurship, fair trade, performance analysis, conscious capitalism, and service centered missions. Each student will work individually and in a team to address a specific, real-world problem or change effort currently underway in a variety of international settings. Same as COMM4743, MGMT-4743, and MISS-4743 This course is normally offered in the spring semester.

## 4990 INTERNSHIP IN INTERNATIONAL BUSINESS

Prerequisites: Admission to College of Business Administration Upper Division, completion of INTL-3313 and approval of advisor and dean.
Supervised and approved international business internship with firm or organization; written and oral reports are required along with employer evaluation. (Variable credit, 1-3 semester hours; 30 hours work required for each hour of credit with a maximum of 3 credit hours.) This course is normally offered as needed.

## JAPANESE COURSES (JAPN)

## 1113 BASIC JAPANESE I

A study of beginning Japanese, enabling the student to understand, respond, read, and write basic Japanese. This course is designed for students participating in the Pacific Rim program. This course is normally offered as needed.

1213 BASIC JAPANESE II
Prerequisite: JAPN-1113.
Basic Japanese II develops the language and writing skills students have begun in Basic Japanese I. The course requires students to increase their levels of understanding of Japanese, both oral and written.

## LEADERSHIP (LDSH)

## 2003 EFFECTIVE LEADERSHIP

This course examines fundamental principles of leadership from a communication perspective, discussing how those principles are evident in politics, business, religious groups, and organizations. Emphasis is placed on differentiating effective from ineffective leadership.

## 2011 COMMUNITY LEADERSHIP SEMINAR

This course is an elective available by invitation only and is not related to the Honors Core Curriculum. Students will network with community leaders to learn practical leadership skills. No direct pre requisites are required for this course, however, nominees should be a sophomore or above, hold at least a cumulative gpa of 3.0, be in good standing with the university, and attend an entry interview before joining the course.This course is normally offered in the spring semester.

## MANAGEMENT (MGMT)

## 3113 PRINCIPLES OF MANAGEMENT

An introduction to the management processes of planning, organizing, leading, and controlling. The theory and history of management, decision making, policy planning, organization planning, supervising, coordinating and controlling, and human resources management are studied. This course is normally offered every semester.

## 3213 OPERATIONS MANAGEMENT

Prerequisites: MGMT-3113 and MATH-2913.
A study of the production operations function in business including the creation of both goods and services. Attention is given to the design, location, and operation of the productive system and its interrelationship with other systems in the organization. The course places special emphasis on the use of quantitative technique in decision making. This course is normally offered in the fall semester.

## 3323 ENTREPRENEURSHIP AND SMALL BUSINESS MANAGEMENT

Prerequisite: Junior standing or permission of instructor.
An introduction and examination of entrepreneurial, small business, self-employment opportunities, and new venture processes. The course covers managerial activities needed for start-up and operation of the small business enterprise. This course is normally offered in the fall semester.

## 3533 ISSUES IN MANAGEMENT

Prerequisite: MGMT-3113.
This course covers a selection of current issues and specialized topics in management.
The course is updated each year to ensure relevant topics are considered and explored.
This course is normally offered in the fall semester.

## 4313 ORGANIZATIONAL BEHAVIOR

Prerequisite: PSYC-1113.
An integration of social sciences as they affect people at work. The organization is analyzed from the standpoint of three interacting systems: the individual, the group, and the organization itself. Emphasis is placed on managing organizational behavior. (Same as PSYC-4313 or SOCI-4313.) This course is normally offered in the spring semester.

## 4413 INTERNATIONAL MANAGEMENT

International management is an analysis of cultural impacts on International management and International business. Along with information technology, international management is the major challenge facing organizations entering the new millennium. All countries and companies are now part of the super competitive global marketplace. Emphasis is placed on the emerging role of the global manager as a cosmopolitan, communicator, negotiator, creator of synergy, and change leader. Seven major world regions - North America, Latin America, Asia, Europe, Middle East, India, and Africa - are discussed for matters of cultural specifics. This course will provide a balanced approach to International Management by discussing international environment, culture, strategy and functions and organizational behavior and human resource management. Same as INTL-4413. This course is normally offered in the fall semester.

## 4513 HUMAN RESOURCE MANAGEMENT

Prerequisites: MGMT-3113.
A study of the major human resource management processes including staffing, training and development, appraisal, compensation, leadership, organizational justice, labor relations, quality of work life, and employee health and safety. The course focuses on contemporary human resource management issues. This course is normally offered in the fall semester.

## 4613 STRATEGIC MANAGEMENT

Prerequisites: FINC-3313, MGMT-3113, MKTG-3313 and Senior standing.
A capstone seminar that draws together the concepts and tools studied in previous business courses. The course uses the case method of instruction and a computerbased simulation, and it affords practice in analyzing authentic managerial problems in free enterprise from the varying viewpoints of diverse disciplines and practice in forming workable solutions which consider both technical and human factors. The course gives particular attention to the standards of conduct appropriate for Christian leaders. This course is normally offered every semester.

## 4743 INTERNATIONAL SOCIAL ENTREPRENEURSHIP

A study and application of the international consulting process using social-entrepreneurial tools to address problems in developing nations. Topics addressed include: poverty, "when helping hurts," microfinance, access to capital, problems with aid, social entrepreneurship, fair trade, performance analysis, conscious capitalism, and service centered missions. Each student will work individually and in a team to address a specific, real-world problem or change effort currently underway in a variety of international settings. Same as COMM4743, INTL-4743, and MISS-4743 This course is normally offered in the spring semester.

## 4990 INTERNSHIP IN MANAGEMENT

Prerequisites: Admission to College of Business Administration upper division, completion of MGMT-3113 and approval of advisor and chair.
Supervised and approved management internship with firm or organization; written and oral reports are required along with employer evaluation. (Variable credit, 1-3 semester hours; 30 hours work required for each hour of credit with a maximum of 3 credit hours.) This course is offered as needed.

## MARKETING (MKTG)

## 3313 PRINCIPLES OF MARKETING

An introduction to the fundamentals of marketing. Product distribution, promotion, and price are studied with emphasis on the marketing aspects of managerial decision making in a dynamic society. This course is normally offered every semester.

## 3413 CONSUMER BEHAVIOR

Prerequisites: Junior standing.
The study of consumer motivations and values in the light of social and psychological theory. This background provides standards of the social and human evaluation of marketing activities, with emphasis on consumer motivation and consumer psychological makeup. The course develops the relationship between social and psychological factors in marketing activities. This course is normally offered in the spring semester.

## 3513 ELECTRONIC COMMERCE AND ONLINE MARKETING

An in-depth study of the structure of online markets, online buyer behavior, business to business online, virtual product offerings, web-based promotion, logistics, and fulfillment, and web-based pricing. Students are required to create a web-based business, design their own web page, and market a product online. This course is normally offered in summer.

## 3713 SALES MANAGEMENT AND THE SALES PROCESS

Prerequisite: Junior standing.
An in-depth look at the process of selling all types of products and services and at the process of managing a sales territory. A combination of lecture, class discussion, and student presentations will be utilized. This course is normally offered in the spring semester.

## 4313 PROMOTIONAL STRATEGIES

Prerequisite: Junior standing, or instructor approval.
An introduction to the various communication channels available for the spread of promotional information about goods, services, and ideas to prospects. The course gives special attention to behavioral considerations and places particular emphasis upon the duties of marketing managers in planning, implementing, and controlling a program of promotional communication. This course is normally offered in the spring semester.

## 4513 MARKETING RESEARCH

Prerequisites: Junior standing.
The study of marketing research theory and technique with special emphasis on the use of the scientific method. The course seeks to develop the student's analytical ability, to familiarize the student with the basic marketing research tools, and to develop the student's proficiency in the art of writing research reports. This course is normally offered in the fall semester.

## 4613 MARKETING MANAGEMENT

Prerequisite: Senior standing.
A study of managerial aspects of the marketing function, emphasizing the qualitative criteria utilized in evaluating marketing alternatives. The course includes topics related to the decision-making process such as marketing research, product development, advertising and promotion, sales management, cost and demand analysis, competition, pricing, packaging, and forecasting. This course is normally offered in the spring semester.

## 4723 GLOBAL MARKETING

This course discusses the marketing of goods, services, and ideas in the context of a multinational environment. Same as INTL-4723. This course is normally offered in the spring semester.

## 4990 INTERNSHIP IN MARKETING

Prerequisites: Admission to upper division, completion of MKTG-3313 and approval of advisor and chair
Supervised marketing internship with approved firm or organization; written and oral
reports are required. (Variable credit, 1-3 semester hours; 30 hours work required for each hour of credit with a maximum of 3 credit hours.) This course is offered as needed.

## MATHEMATICS (MATH)

## 1143 ELEMENTS OF MATHEMATICS I

Prerequisite: SDEV-0103 or a math ACT score of 23 or higher.
Designed to give the liberal arts student a comprehensive overview of the applications of mathematics in today's society with an emphasis on problem-solving skills. Special attention will be given to the role of mathematics. Topics will include set theory, logic, probability, systems of numeration, and number theory. This course is normally offered every semester.

## 1153 ELEMENTS OF MATHEMATICS II

Prerequisite: SDEV-0103 or a math ACT score of 23 or higher.
Topics include algebra, systems of linear equations, geometry, problem solving, and consumer mathematics. This course is normally offered every semester.

## 1213 COLLEGE ALGEBRA

Prerequisite: SDEV-0103 or a math ACT score of 23 or higher.
A study of basic algebraic operations. Includes the solution and graphing of linear
equations, quadratic equations, polynomials, inequalities, logarithms, and exponential functions. Other topics include sequences, series, binomial theorem, systems of equations, and matrices. This course is normally offered every semester.

## 1523 TRIGONOMETRY

Prerequisite: SDEV-0103 or a math ACT score of 23 or higher.
A study of trigonometric equations, their graphs, and inverses. Other topics include trigonometric identities, trigonometric equations, radian degree measure, and the polar coordinate system. This course is offered as needed

## 1614 PRE CALCULUS

Prerequisite: SDEV-0103 or MATH ACT subscore of 23 or higher.
This course is designed to prepare students for college-level calculus courses. Since the basic tool used in calculus is the real-valued function, this course will focus on the definition, evaluation, simplification, and application of such functions. This course will cover the algebra of linear, polynomial, rational, exponential, and logarithmic functions along with a special emphasis on the trigonometric functions. This course is normally offered every semester.

## 1623 INTRODUCTION TO DISCRETE MATHEMATICS

Prerequisite: MATH-1213, MATH-1523, MATH-1614 or MATH-2114.
Topics include sets and set relations, functions, proof techniques, logic, logic functions, logic circuits, counting techniques, and graph theory. This course is normally offered every spring semester.

## 2113 BUSINESS CALCULUS

Prerequisite: MATH-1213
Analytic geometry, limits, derivatives, and integrals involving algebraic, exponential, and logarithmic functions. Applications are primarily related to the areas of business and social sciences. This course is normally offered in the spring semester.

## 2114 CALCULUS I WITH ANALYTICAL GEOMETRY

Prerequisites: MATH-1213 and MATH-1523, or MATH-1614 or the equivalent.
Differentiations and integrations of algebraic and transcendental functions, applications, and analytical geometry. This course is normally offered every semester.

## 2214 CALCULUS II WITH ANALYTICAL GEOMETRY

Prerequisite: MATH-2114.
Differentiations and integrations of inverse trigonometric functions, logarithmic functions, and exponential functions. Topics include formal integration techniques, polar coordinates, conic sections, sequences, and series. This course is normally offered every semester.

## 2314 CALCULUS III

Prerequisite: MATH-2214
The calculus of functions of several variables, partial differentiation, multiple integrals, vectors, and vector functions. This course is normally offered every semester.

## 2913 STATISTICAL METHODS

Prerequisite: MATH-1213 or the equivalent.
Basic experimental statistics, basic probability distributions, methods of estimations,
tests of significance, sampling techniques, inferences concerning population parameters, regression, and correlation. This course is normally offered every semester.

## 3013 DIFFERENTIAL EQUATIONS

## Prerequisite: MATH-2214

First order and simple higher-order differential equations, linear equations with constant coefficients, simultaneous differential equations, series solutions, and applications. This course is normally offered every semester.

## 3113 NUMBER THEORY

## Prerequisite: MATH-2214.

Divisibility, primes, congruencies, functions of number theory, Diophantine equations, Farey fractions, and other related topics. This course is normally offered in the spring semester of even numbered years.

## 3123 MATHEMATICAL MODELING AND STRATEGIES FOR SECONDARY TEACHERS

Prerequisites: MATH-2214 and permission of instructor.
Designed for secondary mathematics teachers to provide experiences that develop significant connections among mathematical ideas and applications of these ideas to problem solving in mathematics. The course includes opportunities for the prospective mathematics teacher to reflect critically on teaching practices and curriculum and to use a variety of tools of technology and manipulatives to create environments to help students learn. This course also includes a survey of the historical development of mathematical systems, including those contributions of underrepresented groups and diverse cultures. This course is normally offered in the fall semester of even numbered years.

## 3313 MODERN ALGEBRA I

Prerequisite: MATH-2214
An introduction to modern algebra. Topics include concepts from set theory, number systems, groups, rings, and fields. This course is normally offered in the fall semester of even numbered years.

## 3413 MODERN ALGEBRA II

Prerequisite: MATH-3313.
A continuation of Modern Algebra I, including vector spaces, polynomial rings, and ideals.
This course is normally offered in the spring semester of odd numbered years.

## 3513 LINEAR ALGEBRA

Prerequisite: MATH-2214.
Matrix theory, quadratic forms, determinants, linear transformations, systems of equations, eigenvalues, and eigenvectors. This course is normally offered every fall semester.

## 3623 INTRODUCTION TO ANALYSIS

Prerequisite: MATH-2214
A rigorous approach to the usual topics encountered in Calculus I, II, \& III such as limits, continuity, differentiation, integration, and infinite series. The course is intended to prepare the student for more advanced analysis courses such as Advanced Calculus, Introduction to Real Analysis, or Introduction to Complex Analysis usually encountered at the first year graduate level. The construction of mathematical proofs will be emphasized. This course is offered as needed.

## 3813 MODERN GEOMETRY

Prerequisite: MATH-2214.
Advanced Euclidean geometry, axiomatic geometries, non-Euclidean geometry, and graph theory. This course is offered as needed.

## 4113 PROBABILITY AND STATISTICS I

Prerequisite: MATH-2314
Simple probability models, random variables, distribution functions, and discrete and continuous distributions. This course is normally offered in the fall semester of odd numbered years.

## 4213 PROBABILITY AND STATISTICS II

Prerequisite: MATH-4113.
Sampling, presentation of data, testing statistical hypotheses, estimating and testing variability, and comparisons of populations. This course is normally offered in the spring semester of even numbered years.

## 4313 COMPLEX VARIABLES

Prerequisites: Any two math courses numbered 3000 or above
Complex numbers, analytic functions, integration series, contour integration, analytic continuation and multi-valued problems, conformal mappings, boundary value problems, and integral transforms. This course is offered as needed.

## 4513 POINT SET TOPOLOGY

Prerequisites: Any two math courses numbered 3000 or above.
Theory of point sets and abstract spaces with applications to analysis. This course is offered as needed.

## 4811 SEMINAR IN MATHEMATICS

Prerequisite: Senior standing.
A seminar uniting the varied elements of the mathematics major. A written and oral presentation covering a current research topic in mathematics is required. This course is normally offered every semester.

## 4900 INDEPENDENT STUDY IN MATHEMATICS

Prerequisite: Juniors or seniors with approval of the instructor and of the departmental chair.
Assigned research, readings, and reports based on the needs of the individual student. ( $1-3$ hours.) This course is offered as needed.

## MECHANICAL ENGINEERING (MECH)

## 3403 ENGINEERING MATERIALS

Corequisites: ENGR-2533.
An introduction to engineering materials with emphasis placed on proper material selection in design. Course topics will include the relationships between microscopic structure and the mechanical properties of metals, polymers, and ceramics and how material properties may be "engineered" through alloying, heat treating, etc. Lecture - 3 hours. This course is normally offered in the fall semester.

## 3443 FLUID MECHANICS

Prerequisite: ENGR-2433.
A study of fluid statics and dynamics. Application of mass, energy and momentum conservation principles to design and analysis of fluid devices and systems, including introductions to boundary layer theory, dimensional analysis and compressible flow. Lecture - 3 hours. This course is normally offered in the spring semester.

## 3453 THERMODYNAMICS II

Prerequisites: ENGR-2433.
A continuation of thermodynamics topics such as unsteady processes, advanced cycles, gas mixtures, psychrometrics, chemical and phase equilibrium, combustion analysis, thermodynamic property relations and compressible flow. Lecture -3 hours. This course is normally offered in the fall semester.

## 3613 MANUFACTURING PROCESSES

Prerequisites: ENGR-3403.
An introduction to the various techniques and manufacturing processes used to fabricate and assemble components. Emphasis is placed on understanding the advantages and limitations of each technique. Lecture -2 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 3813 MECHATRONICS

## Prerequisite: ENGR-2623.

Common applications of diodes and transistors plus concepts and applications of digital systems, including micro-processor based systems. Lecture - 2 hours; Laboratory - 3 hours. This course is normally offered in the fall semester.

4113 MECHANICAL APPLICATIONS OF PARTIAL DIFFERENTIAL EQUATIONS Prerequisite: MATH-3013.
Partial differential equation applications to common mechanical engineering problems. Parabolic, hyperbolic, and elliptic equations. Emphasis on analytical solution methods. Lecture -3 hours. This course is normally offered in the fall semester.

## 4133 DYNAMIC SYSTEMS AND CONTROLS

Prerequisites: ENGR-2523 and ENGR-2623.
Mathematical modeling for dynamic response of electrical, mechanical, fluid, and thermal systems. Introduction to control systems. System response characteristics are investigated by use of state variable theory, time domain and frequency response analysis, root locus and Nyquist stability criteria. Design of mechanical engineering control systems.
Lecture -3 hours. This course is normally offered in the spring semester.

## 4143 FINITE DIFFERENCE METHODS

Prerequisites: MATH-3013.
Ordinary and partial differential equation application to common mechanical engineering problems. Review of analytical solutions, but emphasis on development and solution of numerical models.
Lecture -3 hours. This course is normally offered in the spring semester.
4213 MACHINE DESIGN
Prerequisite: ENGR-2533.
Analysis of machine components, stress analysis, failure prediction, fatigue failure, safety, and reliability. Lecture -3 hours. This course is normally offered in the spring semester.

## 4243 HEAT TRANSFER

Prerequisite: MECH-3443.
Analysis of heat transfer devices and systems. Analytical solutions of conservation equations including conduction, convection, and radiation effects. Design and analysis of heat exchangers. Lecture -3 hours. This course is normally offered in the fall semester.

## 4311 THERMAL-FLUIDS LAB

Prerequisites: ENGR-3311
Corequisite: MECH-4243.
Application of experimental methods for pressure, temperature and flow measurement to thermodynamic systems, fluid power devices, heat exchangers, and aerodynamic surfaces. Data collection, analysis and interpretation of results with emphasis on report writing. Laboratory - 1 hours. This course is normally offered every semester.

## 4313 AERODYNAMIC DESIGN

An introduction to the design of two and three-dimensional aerodynamic surfaces including symmetrical and cambered airfoils and high lift devices. Theoretical analysis will be performed using elementary potential theory and other computer analysis. This course is normally offered in the fall semester.

## 4523 FINITE ELEMENT ANALYSIS

Prerequisite: MATH-3013 and MECH-3613.
An introduction to the mathematical foundation of the finite element method and the responsible application of the technique to mechanical design and analysis. The mathematical element formulations for simple truss, beam, and conduction problems, as well as the use of commercial finite element software will be addressed. This course is normally offered in the fall semester.

## 4623 ADVANCED ENGINEERING MATERIALS

Prerequisite: MECH-3403.
A continuation of the study of material science, including a more in depth look at metal and polymer behaviors, plus discussions of modern materials including composites, nanomaterial, and multifunctional materials such as shape memory alloys. Special emphasis will be placed on material selection considerations for engineering design. Lecture -3 hours. This course is normally offered in the spring semester.

## 4732 SYSTEMS DESIGN I

Prerequisites: Advisor permission.
A recap and extension of problem-solving skills introduced in earlier courses using a systems design approach; to prepare the student for the capstone design project work of MECH-4742 and MECH-4752; topics to include engineering design terminology, methodology and procedures; technical memos and reports; safety, ethics, information gathering and team dynamics. Significant emphasis on oral presentations is included.

Laboratory - 3 hours. Same as ELEC-4732 and CENG-4732. This course is normally offered in the spring semester.

## 4743 SYSTEMS DESIGN II

Prerequisites: Advisor permission and MECH-4732.
An implementation of the design methodology covered in Systems Design I. Applications of research and design relating to real world or industry problems; interaction with other fields of engineering and science. MECH-4742 and MECH-4752 constitute a single two-semester project experience. Laboratory -6 hours. Same as ELEC-4743 and CENG-4743. This course is normally offered every semester.

## 4753 SYSTEMS DESIGN III

Prerequisites: Advisor permission and MECH-4743.
A continuation and completion of the capstone design project begun in MECH-4742.
Students not successfully completing the entire project must normally retake MECH-
4742/4752 with a new project assignment. Laboratory - 6 hours. Same as ELEC-4753 and CENG-4753. This course is normally offered every semester.

## 4923 INTERNSHIP FOR ENGINEERING PRACTICE

The engineering programs encourage all students to participate in at least one summer of engineering internship work. The engineering internship experience is very important to providing real-world application of the classroom experience and also has become an expectation by employers of engineers internationally. This course allows international students in F-1 status majoring in engineering at OC to participate in Curricular Practical Training. Enrollment in this course will be under the supervision of an individual engineering professor. A journal or summary paper of the internship experience will be required at the conclusion of the employment period. 1 to 3 credit hours. This course is offered as needed.

## MEDICAL LABORATORY SCIENCES (MLSP)

## 4001 INTRODUCTION TO MEDICAL LABORATORY

Prerequisite courses include: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
This one hour course is a study of the laboratory environment including laboratory safety, equipment, instrumentation, vocabulary, and quality control/quality assurance: includes the principles and techniques used in phlebotomy and practicum in processing and phlebotomy. This course is usually offered during the fall semester.

## 4002 PATHOGENIC MICROBIOLOGY PRACTICUM

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624
BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001, MLSP-4003.
This two semester hour practicum emphasizes the examination and identification of pathogenic microbes in abnormal blood, and other body fluids and tissues with emphasis on their relationships to various disease processes. This course is usually offered during the fall semester.

## 4003 CLINICAL PATHOGENIC MICROBIOLOGY

Prerequisite courses include BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001, MLSP-4002 This three hour course emphasizes diagnostic clinical microbiology. Examination of samples from different body sites provides students the opportunity to recognize and identify organisms that comprise the normal flora and those that are potential pathogens. This course includes conventional and rapid biochemical methods for detection and identification of significant organisms. Principles and application of quality control procedures are discussed. This course is usually offered during the fall semester.

## 4004 IMMUNOHEMATOLOGY AND LAB

Prerequisite courses required are BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001, MLSP-4012.
This four hour course is a study of the major blood groups of humans including the red cell antigen systems, alloantibodies, and non-immune stimulated antibodies. The relationship of blood group systems to compatibility testing, transfusion reactions, and hemolytic disease of the newborn will be discussed. This course is usually offered during the fall semester.

## 4011 URINALYSIS AND BODY FLUIDS

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001.
This one hour course is a study of selected body fluids including urine, amniotic fluid, cerebrospinal fluid, pleural fluid, peritoneal fluid, pericardial fluid, and synovial fluid. This course is usually offered during the fall semester.

## 4012 BLOODBANK PRACTICUM

Prerequisite courses required are BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-

2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001, MLSP-4004.
This two hour practicum allows the student to obtain practical experience, with direct supervision, within the Blood Bank Department performing testing of blood group systems, compatibility testing, and transfusion reactions work-ups, at MLS entry level job position. This course is usually offered during the fall semester.

## 4021 HEMOSTASIS

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001
This one hour course is a study of the normal process of blood coagulation, including laboratory testing methods. The focus is on disease processes such as idiopathic thrombocytopenic purpura (ITP), autoimmune and alloimmune thrombocytopenia, thrombocytopenic purpura (TTP) commonly seen in the medical laboratory. This course is usually offered during the fall semester.

## 4022 MOLECULAR LABORATORY PRACTICUM

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624
BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001.
This two hour practicum emphasizes the examination of normal and abnormal blood serum and plasma, and other body fluids in the clinical setting with emphasis on their relationships to various disease processes with emphasis on molecular methodology in treatment and diagnosis. The student is introduced to the use of immunogenetics, histocompatibility, and transplant immunology. This course is usually offered during the fall semester.

## 4101 MEDICAL LABORATORY SCIENCE CERTIFICATION REVIEW

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624
BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913 MLSP-4001 MLSP-4001 MLSP-4002 MLSP-4004.
Concurrent enrollment in the following courses is required: MLSP-4102, MLSP-4103, MLSP-4104.
This one hour course is a review of MLS coursework in preparation to sit for the American Society of Clinical Pathology (ASCP) Board of Certification (BOC). This course is usually offered during the spring semester.

## 4102 LABORATORY MANAGEMENT

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913.
Concurrent enrollment in the following courses is required: MLSP-4001.
This two hour course is designed to provide the student with the opportunity to develop entry-level management and supervisory skills. Topics include principles of communication; leadership styles; interviewing; planning; financial analysis; and policies, procedures, and regulations. Learning principles and objectives are discussed. This course is usually offered during the spring semester.

## 4103 CLINICAL CHEMISTRY

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624
BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913 MLSP-4001.
Concurrent enrollment in the following courses is required: MLSP-4122.
This three hour course cover the theory and laboratory methodology of analytical biochemistry, instrumentation, laboratory mathematics, routine and special procedures, and medical significance.This course is usually offered during the spring semester.

## 4104 HEMATOLOGY AND LAB

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913 MSLP-4001 MLSP-4011 MLSP-4021.
Concurrent enrollment in the following courses is required: MLSP-4112.
This four hour course is a study of the normal production, maturation, and function of erythrocytes, leukocytes, and platelets. Common disorders involving such cells will be discussed with emphasis on the pathogenic mechanisms. Hematologic laboratory tests and their correlations with disease states will also be examined. An introduction to quality control methods will also be included. The laboratory portion of the course emphasizing the examination of normal and abnormal blood smears with emphasis on identification of cells and their relationships to various disease processes. This course is usually offered during the spring semester.

## 4112 HEMATOLOGY, COAGULATION URINALYSIS AND BODY FLUIDS

 PRACTICUMPrerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913 MLSP-4001 MLSP-4021.
Concurrent enrollment in the following courses is required: MLSP-4104, MLSP-4103. This two hour practicum allows the student to obtain practical experience, with direct supervision, within the Hematology, Coagulation and Urinalysis Department performing analytical tests on blood cells, plasma, urine and body fluids, at MLS entry level job position. This course is usually offered during the spring semester.

4122 CHEMISTRY PRACTICUM
Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624 BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213 MATH-2913 MLSP-4001 MLSP-4001 MLSP-4021.
Concurrent enrollment in the following courses is required: MLSP-4103 MLSP-4104. This two hour practicum allows the student to obtain practical experience, with direct supervision, within the Chemistry Department performing analytical tests on serum, plasma, urine and body fluids, at MLS entry level job position. This course is usually offered during the spring semester.

## 4132 MISCELLANEOUS LABORATORY PRACTICUM

Prerequisite courses required: BIOL-1115 BIOL-2022 BIOL-2314 BIOL-2523 BIOL-2624
BIOL-3224 BIOL-4014 BIOL-4213 CHEM-1115 CHEM-1215 CHEM-3115 MATH-1213
MATH-2913 MLSP-4001 MLSP-4003 MLSP-4004 MLSP-4021.
Concurrent enrollment in the following courses is required: MLSP-4102 MLSP-4103 MLSP4104.

This two hour course emphasizes the examination of normal and abnormal blood serum and plasma, and other body fluids in the clinical setting with emphasis on their relationships to various disease processes. This practicum will have emphasis on professionalism, research, and service in healthcare and the specific needs of the student. This course is usually offered during the spring semester.

## MISSIONS (MISS)

## 3003 VOCATIONAL MINISTRY

A course that examines a range of issues related to Christian ministry when it is not fully remunerated by a church or parachurch agency. Emphasis is placed on applying one's gifts and talents in diverse fields of endeavor that are commonly viewed as "secular" but with the explicit goal of building up the kingdom of God worldwide. Non-textual. Same as BIBL3003. Normally offered every fall semester.

## 3013 MISSION PREPARATION

A course taught by one who has served as a missionary. The following subjects are treated: the New Testament concept of missions and missions today; a description of the work of a missionary; doctrinal preparation for the mission field; emotional preparation; spiritual preparation; preparing the supporting home church missionary cycle, entering the host country; communicating with the home church; effective missionary methods for various fields; maintaining physical, mental, emotional, social, and spiritual health in the mission field. Non-textual. Same as BIBL-3033. This course is normally offered in the spring semester of even numbered years.

## 3033 BIBLICAL MISSIONS METHODS

The primary assumption of this course is that Christian Scripture witnesses to God who created the world, deeply cares for the world, is active in the world, and has a purpose for creation. In other words, the Bible witnesses to the God of missions. This course will examine Biblical theology (Who is God?), identify (Who are we?), and practice (What is God doing? What are we doing?) within a variety of contemporary cultures and contexts Emphasis will be given to discerning missional identities, theologies, and practices in the Biblical narrative, and God's activity in the world through the Spirit and in various cultural contexts. Same as BIBL-3043. Normally offered fall semester of odd numbered years.

## 3113 WOMEN IN MISSIONS

A study of the unique opportunities, challenges and difficulties which single and married women face on the mission field. Non-textual. This course is normally offered in the fall semester.

## 3143 INTRODUCTION TO ASIAN CIVILIZATIONS

Prerequisite: Junior standing
Introduces the major cultural themes of East, Southeast, and South Asia. Students will learn about the geographical, social, political, economic, cultural, and religious features of the three major regions of Asia. Fulfills the core curriculum non-Western civilization requirement. Same as SOCI-3143. Non-textual. This course is offered as needed.

## 3153 URBAN MINISTRY

An examination of diverse aspects of ministry within urban contexts both in the United States and abroad. Topical areas covered include cities in the Bible, principles of urban evangelism and missions, urban church growth, and ministry in contexts of ethnic, racial, and socioeconomic diversity. Non-textual. This course is normally offered in the spring semester.

## 3213 CHURCH GROWTH

A study of the dynamics of the intersection between gospel, church, and culture. Emphasis will be given to how the gospel engages cultures through the life and witness of the church. Same as BIBL-3153. Non-textual. This course is normally offered in the fall semester of even numbered years.

## 3313 CROSS-CULTURAL MINISTRY

A course that examines spiritual, theological, and missiological issues involved in ministering to individuals and groups in intercultural contexts, both foreign and domestic. Non-textual. Same as BIBL-3333. This course is normally offered in the spring semester of even numbered years.

## 3513 WORLD RELIGIONS

## Prerequisite: Junior standing

A comparative study of the beliefs and practices, as well as the historical and sociological impact, of several of the world's principal religious traditions. These include indigenous traditions, Judaism, Islam, Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Fulfills the core curriculum non-Western civilization requirement. Same as SOCI-3513. Nontextual. This course is normally offered every semester.

## 3613 CULTURAL ANTHROPOLOGY

A course that is designed with the intent of enhancing students' cultural intelligence, specifically in terms of understanding cultural diversity and functioning more effectively in culturally diverse contexts. A significant component of the course is devoted to the study of the anthropology of religion. This course fulfills the non-Western civilization requirement in the Core Curriculum. Same as BIBL-3613 and SOCI-3613. This course is normally offered every spring semester.

## 3673 NEW RELIGIOUS MOVEMENTS

This course examines both religious and quasi-religious teachings and practices in a variety of newer religious movements of diverse cultural and philosophical origins. This course fulfills the non-Western civilization requirement in the Core Curriculum. Same as SOCl-3673. This course is offered as needed.

## 4113 THE LOCAL CHURCH AND MISSIONS

A study of the responsibility of the local church in world evangelism with suggestions concerning how to lead the local church to accept and carry out its missionary work. Nontextual. Same as BIBL-4113. This course is normally offered in the spring semester of even numbered years.

## 4313 MISSIONS IN THE CONTEMPORARY WORLD

A study of the impact of various issues upon mission work as it is actually being carried out today around the world, taught by a visiting missionary. Content varies according to the particular field experience of the instructor. Non-textual. Same as BIBL-4303. This course is normally offered as needed.

## 4633 INTERCULTURAL COMMUNICATION I

Prerequisite: ENGL-1213.
A survey of the basic concepts of how people communicate effectively across cultural boundaries, with special attention given to the complex nature culture plays in communication. ENGL-4633 fosters in students an understanding and appreciation of their own culture and cultural patterns of communication and those of other cultures. Same as COMM-4633, ENGL-4633, and SOCI-4633. Non-textual. This course is normally offered in the spring semester of odd numbered years.

## 4643 INTERCULTURAL COMMUNICATION II

Prerequisite: ENGL-1213 or 2113.
A continuation of MISS-4633, typically taught while a student is living in a foreign culture. Same as ENGL-4643 and SOCI-4643. Non-textual. This course is offered as needed.

## 4714 MISSIONS PRACTICUM

On-site supervised ministry experience in a missions situation, either foreign or domestic, by invitation and with a faculty supervisor. The course includes readings, a journal, and a thorough evaluation by the field supervisor. Non-textual. This course is offered as needed.

## 4743 INTERNATIONAL SOCIAL ENTREPRENEURSHIP

A study and application of the international consulting process using social-entrepreneurial tools to address problems in developing nations. Topics addressed include: poverty, "when helping hurts", microfinance, access to capital, problems with aid, social entrepreneurship, fair trade, performance analysis, conscious capitalism, and service centered missions. Each student will work individually and in a team to address a specific, real-world problem or change effort currently underway in a variety of international settings. Same as COMM4743, INTL-4743, and MGMT-4743 This course is normally offered in the spring semester.

## 4813 MISSIONS EXPERIENCE

Content varies. Course may be repeated. This course is offered as needed.

## ‘4900 INDEPENDENT STUDY IN MISSIONS

Assigned readings, reports or projects based on the needs of the individual student. Normally taken only by juniors or seniors with approval of the dean of the college. (2-3 hours) This course is offered as needed.

## MUSIC (MUSC)

## 1000 RECITAL ATTENDANCE

Regular attendance at on and off campus musical performances. Required each semester for music majors. This course is normally offered every semester.

## 1023 FUNDAMENTALS OF MUSIC THEORY

Includes notation and drills in keys, scales, intervals, triads, and score reading, and emphasizes basic skills in sight-reading rhythm and pitch in bass and treble clefs. The course is not applicable for credit in major, but is required if the student is unable to pass minimum requirements for admission to MUSC-1112 (which follows in the music theory sequence). This course is normally offered in the fall semester.

1112 MUSIC THEORYI
Prerequisite: MUSC-1023, if student is unable to meet minimum entrance requirements. Chord connection, four-part writing, cadences, dictation and sight singing of intervals, scales and melodies, rhythms, broken chords and keyboard application. Class - 3 hours. This course is normally offered in the spring semester.

## MUSIC THEORY SEQUENCE II

Prerequisite: MUSC-1112
The two courses below cover secondary diatonic chords, non-harmonic tones, dominant sevenths, simple modulation, dictation, and sight singing of more difficult melodies, intervals, scales, and rhythms, cadences, etc. Concurrent enrollment in both is required except with permission of the department chair. Offered in the fall semester.

## 1211 EAR TRAINING II

Class -2 hours. This course is normally offered in the fall semester.
1212 MUSIC THEORY II
Class - 2 hours. This course is normally offered in the fall semester.

## 1301 VOCAL ENSEMBLE

A student may register for credit in an ensemble in which he or she performs if the group is sufficiently active to justify the credit. Permission of instructor required. This course is offered as needed.

## 1311 UNIVERSITY CHORALE

The OC Chorale offers opportunities for experience in choral singing. A wide range of both sacred and secular choral literature is studied with numerous performances scheduled. Participation of members in all scheduled rehearsals and performances is required. Membership by audition. Rehearsal - 4 hours. This course is normally offered every semester.

## 1321 MUSIC PRODUCTION WORKSHOP

Prerequisite: Permission of instructor required.
Requires at least 60 hours in rehearsal and performance on stage in a faculty-directed campus musical production. This course is normally offered every semester.

## 1331 SYMPHONIC BAND

The OC Symphonic Band performs for campus functions, in concert and on tour. Participation of all members in scheduled rehearsals and performances is required. Membership by audition. Rehearsal - 4 hours. This course is normally offered every semester.

## 1341 JAZZ ENSEMBLE

Prerequisite: participation in Symphonic Band or instructor permission.
Large ensemble jazz music is the emphasis of this group. Performs for campus and civic
functions in concert and on tour. Membership by audition. Rehearsal -3 hours. This course is normally offered every semester.

## 1351 INSTRUMENTAL ENSEMBLE

Prerequisite: Permission of instructor required.
A student may register for credit in an ensemble in which he or she performs if the group is sufficiently active to justify the credit. This might include such groups as brass choir or OC's Sweat Band, a group performing at home basketball games in the "Eagles' Nest."
This course is normally offered every semester.

## 1361 ORCHESTRA

Credit for orchestra is available to OC students through participation in the Oklahoma Community Orchestra, the university's official orchestra-in-residence. Permission required. Rehearsal -2.5 hours. This course is normally offered every semester.

## 1371 UNIVERSITY SINGERS

OC's largest chorus, open to all students. No audition is required. Performs several concerts throughout the school year.

## 1381 OPERA STUDIO

Prerequisite: permission of instructor required.
Requires at least 60 hours in rehearsal and performance on stage in a faculty-directed campus opera production. Offered spring semester. This course is offered as needed.

## 1391 CHAMBER SINGERS

Prerequisite: participation in University Chorale or instructor permission.
The study and performance of significant choral works from all periods of musical style. Membership by audition. Rehearsal -3 hours. This course is normally offered every semester.

## 1451 UNIVERSITY CHAMBER ORCHESTRA

The OC chamber orchestra studies chamber music of varied musical styles and performs concerts for university and civic programs. Sight-reading skills are also emphasized. Membership by permission. Rehearsal -2.5 hours. This course is normally offered every semester.

## PRIVATE INSTRUCTION

Students may register for private instruction in piano, voice or any of the instruments listed, composition, or improvisation. Piano students will audition for placement in Class Piano or private instruction. Students registering for one hour credit (such as 1501) receive one halfhour lesson per week. Those registering for two hours credit (such as 1502) receive one one-hour lesson per week. There is a fee of $\$ 225$ per credit hour for all private instruction classes. Some private lessons additionally require payment of accompanist fees at $\$ 20$ per hour. Students should check with the private instructor to determine specific accompanist expectations.

## 1501, 1502 PIANO

Prerequisite: MUSC-2581 or instructor permission.
This course is normally offered every semester.

## 1511, 1512 VOICE

This course is normally offered every semester.

## 1531, 1532 BRASS INSTRUMENT

This course is normally offered every semester.

## 1541, 1542 WOODWIND INSTRUMENT

This course is normally offered every semester.

## 1551, 1552 PERCUSSION INSTRUMENT

This course is normally offered every semester.

## 1561, 1562 STRING INSTRUMENT

This course is normally offered every semester.

## 1571, 1572 GUITAR

This course is normally offered every semester.

## 1581 CLASS PIANO I

An introduction to piano playing for the student with little or no prior keyboard experience. Instruction will stress understanding notation of pitch and rhythm; playing with appropriate fingering, articulation and dynamics; gaining technical facility and coordination between hands; playing pieces in major and minor five-finger patterns; and playing melodies with triad accompaniments. Some selections will be memorized. Class - 2 hours. This course is normally offered every semester.

## 1612 APPLIED COMPOSITION

Prerequisite: Permission of the music department chair.
This course is normally offered every semester. There is a fee per credit hour for this course.

## 1681 CLASS PIANO II

Prerequisite: Grade of B or better in Class Piano I, or audition for piano faculty.
Continuation of skills presented in Class Piano I or previous keyboard experience.
Students will sight read and play ensemble and solo repertoire of various styles and technical studies in major and minor keys. Basic skills emphasized include 2-octave major and minor scales; major, all types of triads in progressions, inversions, and arpeggios; harmonizing melodies, using diatonic and second chords appropriately; and using the damper pedal. Classes normally limited to eight students. Class - 2 hours. This course is normally offered every semester.

## 1691 APPLIED IMPROVISATION

Prerequisite: Permission of the music department chair.
Private lesson in jazz improvisation with the instrument of the student's choice. This course is normally offered every semester. There is a fee per credit hour for this course.

## 2013 MUSIC APPRECIATION

A survey course designed to furnish a basis for intelligent appreciation for music with opportunity for students to listen to recordings and to attend concerts. This course is normally offered every semester.

## MUSIC THEORY SEQUENCE III

The two courses below cover modulation to closely related keys, altered chords and higher discords, original melodies and harmonizations, and ear training. Concurrent enrollment in both is required except with permission of the department chair. This course is normally offered in the spring semester.

## 2111 EAR TRAINING III

Class - 2 hours. This course is normally offered in the spring semester.

## 2112 MUSIC THEORY III

Class - 2 hours. This course is normally offered in the spring semester.

## MUSIC THEORY SEQUENCE IV

The two courses below cover a continuation of altered chords, augmented sixths, secondary diminished sevenths, remote and enharmonic modulations, aural study of remote modulations, unusual and mixed meters, and altered chords Concurrent enrollment
in both is required except with permission of the department chair. This course is normally offered in the fall semester.

## 2211 EAR TRAINING IV

Class - 2 hours. This course is normally offered in the fall semester.

## 2212 MUSIC THEORY IV

Class - 2 hours. This course is normally offered in the fall semester.

## 2512 DICTION I: ENGLISH AND ITALIAN

Prerequisite: For vocal majors and minors; others by permission.
A study of the International Phonetic Alphabet as it pertains to the singing of English and Italian song and opera literature. This course is normally offered in the spring semester of odd numbered years.

## 2522 DICTION II: FRENCH AND GERMAN

Prerequisite: For vocal majors and minors; others by permission.
A study of the International Phonetic Alphabet as it pertains to the singing of German and French song and opera literature. This course is normally offered in the fall semester of odd numbered years.

## 2581 CLASS PIANO III

Prerequisite: Grade of B or better in Class Piano II, or audition for piano faculty. Continues functional piano skills from Class Piano II or previous keyboard experience. The primary focus is learning to play intermediate repertoire from various historical periods of music with appropriate style and fluency. Assignments provide opportunity to develop skills in sight reading, playing I-IV-I-V-I progressions in all keys and positions, playing 2-octave scales in all keys, harmonizing and transposing melodies using diatonic triads, seventh chords, and secondary chords. The final exam for Class Piano III includes the opportunity to pass the repertoire section of the Piano Proficiency Exam, which is a graduation requirement for OC music majors. Classes normally limited to eight students.
Class - 2 hours. This course is normally offered in the fall semester.

## 2681 CLASS PIANO IV

Prerequisite: Grade of B or better in Class Piano III, or audition for piano faculty. This is the capstone course in the pursuit of functional piano skills for music majors. Assignments continue to develop technical skill in playing scales, chord progressions, modulations, and ensemble repertoire. Emphasis is placed on harmonizing and improvising accompaniments in various styles, score reading, and accompanying instrumentalists and vocalists fluently. The final exam includes the sight reading, accompanying, and functional skills sections of the Piano Proficiency Exam, which is a graduation requirement for all music majors. Students must continue to enroll in piano until the exam is passed with a score of $85 \%$ or better. Classes normally limited to eight students.
Class - 2 hours. This course is normally offered in the spring semester.

## 3000 JUNIOR RECITAL

Prerequisite: To enroll, students must have achieved a satisfactory level of performance skill as specified in published departmental materials.
Elective solo recital performance on major instrument in the student's junior year. This course is offered as needed.

## 3121 CLASS WOODWINDS

A practical study of woodwind instruments of the band with emphasis on embouchure development, articulation techniques, and general pedagogical principles. This course is normally offered in the spring semester of even numbered years.

## 3131 CLASS BRASS

A practical study of the brass instruments of the band with emphasis on embouchure development, articulation techniques, and general pedagogical principles. This course is normally offered in the fall semester of odd numbered years.

## 3141 CLASS PERCUSSION

A practical study of the percussion instruments of the band, including an introduction to rudiments and basic playing technique, plus an overview of all the instruments of the section. This course normally offered in the spring semester of odd numbered years.

## 3151 CLASS STRINGS

A practical study of the string instruments of the orchestra with emphasis on bowing techniques, articulation, performance and general pedagogical principles. This course is normally offered in the fall semester of even numbered years.

## 3213 PERSPECTIVES IN WORLD MUSIC

The goal of this course is to enable the student to become an active listener and observer of music from many different cultures. Particular emphasis will be placed on understanding how non-Western music traditions compare with and contrast to Western music traditions. It is the intention of this course to expand the student's awareness of the power of music, both as a human expression and a reflection of culture. The student will identify shaping trends and influences, the hybridization of multiple music cultures, and will examine the concept of "globalization" as it might apply to music. In order to accomplish course goals, students will learn how to listen to music in an active and conscious way. This will require the identification and analysis of the elements of music at work in each musical example we listen to (these include melody, rhythm, harmony, form, and timbre.) This course is normally offered every semester and In the summer.

Note: MUSC-2211 and MUSC-2212 must be completed before attempting the following courses unless approval is received from the department chair.

## 3323 MUSIC HISTORY I: ANCIENT MUSIC THROUGH THE RENAISSANCE

Prerequisite: For music majors; others by permission
An introduction to ancient non-Western music and to music from the beginnings of Western civilization through the Renaissance period. The course begins with a brief overview of Western and non-Western music through all time periods, along with a primer for strengthening listening skills. The course features style analysis-visual and aural-of representative compositions and analysis of the relationship of music to socio-cultural background. This course is normally offered every third semester.

## 3333 MUSIC HISTORY II: BAROQUE AND CLASSICAL MUSIC

Prerequisite: For music majors; others by permission.
Continuation of MUSC 3323. An overview of Western (and selected non-Western) music from the early Baroque through the Classical era (approximately 1600-1820). The course features style analysis-visual and aural-of representative compositions and analysis of the relationship of music to socio-cultural background. This course is normally offered every third semester.

## 3343 MUSIC HISTORY III: ROMANTIC AND CONTEMPORARY MUSIC

Prerequisite: For music majors; others by permission
Continuation of MUSC 3333. An overview of Western (and selected non-Western) music from the early Romantic period (approximately 1820) up to the present day. The course features style analysis-visual and aural-of representative compositions and analysis of the relationship of music to socio-cultural background. This course is normally offered every third semester.

## 3352 LEADING MUSIC IN WORSHIP

This course prepares the student to lead singing in worship. The curriculum includes the fundamentals of song leading with a focus on the permeation of scripture in song. The course will investigate Biblical references about music, study application of theology in music, and gather songs and hymns to support various scriptures and themes for worship. The course is normally offered spring of odd numbered years.

## 3412 ORCHESTRATION

A practical study of the technical scope of orchestral and band instruments, providing introductory performance experience in instrumental families. Students will complete transcription exercises for each instrument family and a major transcription project for large instrumental ensemble. Fluency with computer programs is expected. This course is normally offered in the fall semester of even numbered years.

## 3452 VOCAL PEDAGOGY

Prerequisite: For vocal majors and minors with Junior or Senior standing; others by permission.
A course for those wanting to teach voice at privately and those who will teach group vocal technique as choral directors. Emphasis is given to the science of vocal production: phonation, respiration, and resonance. This course is normally offered in the spring semester of even numbered years.

## 3462 PIANO PEDAGOGY I

Topics will include the philosophy and benefits of piano instruction, discussion of teaching styles and learning styles, methods and materials for teaching early level students, the business aspects of the independent studio, developing piano technique, and preparing students for contests and recitals. The student will plan and teach segments of group lessons and individual lessons with pre-college students. Lecture -2 hours; Laboratory - 1 hour. This course is normally offered in the spring semester of even numbered years.

## 3561 PIANO PEDAGOGY II

A survey of additional methods and literature for the elementary and intermediate levels of piano instruction. Observations of student contests and performances are required. This course is offered as needed.

## 4001 SENIOR RECITAL

Solo recital performance in major performance area. To enroll, students must have achieved a satisfactory level of performance skill as specified in published departmental materials. This course is normally offered every semester.

## 4011 SENIOR PROJECT

Senior music majors may submit to the music faculty a proposal for a capstone project that will focus on performance, research, composition, and/or teaching. Additional guidelines are published in the Music Department Handbook. This course is normally offered every semester.

## 4212 CHORAL CONDUCTING I

Basic conducting skills, beat patterns, cueing and vocal score preparation, interpretation, nonverbal communication and rehearsal techniques. Includes choral conducting experience. This course is normally offered in the spring semester of even numbered years.

## 4222 CHORAL CONDUCTING II

Emphasis on rehearsal techniques, group dynamics and discipline, etc., involving conducting labs with music students as performers. An introduction to Renaissance,

Baroque, Classical, Romantic, and Twentieth Century performance practice. This course is normally offered in the fall semester of even numbered years.

## 4312 INSTRUMENTAL CONDUCTING I

Basic conducting skills, beat patterns, cueing and instrumental score preparation, interpretation, nonverbal communication, and rehearsal techniques. Includes instrumental conducting experience with classmates as performers. This course is normally offered in the fall semester of even numbered years.

## 4322 INSTRUMENTAL CONDUCTING II

Emphasis on score study, rehearsal techniques, group dynamics, etc., involving conducting labs with music students as performers. This course is normally offered in the spring semester of odd numbered years.

## 4411 PIANO LITERATURE

A survey course to cover standard keyboard repertoire from 1700 to the present. This music elective may be taken as an independent study or in a class if enrollment is sufficient. Considerable emphasis will be on listening to piano music from the different periods of music history and discussing stylistic characteristics. This course is offered as needed.

## 4900 INDEPENDENT STUDY IN MUSIC

Music majors only, or by approval of the department chair.
Arranging, composition, sixteenth-century counterpoint, or other study. Three hours total applicable toward graduation. (1-3 hours) This course is offered as needed.

## NURSING (NURS)

## 1011 INTRODUCTION TO NURSING

An introductory nursing course designed to acquaint the student with a historical nursing perspective from the beginnings of the profession to current professional developments. Students will be introduced to nursing trends and changing national and global health care delivery methods. Lecture -1 hour. This course is normally offered in the fall semester.

## 2003 HEALTH ASSESSMENT

Prerequisites: BIOL-1013
Corequisite: BIOL-2523.
Course focuses on the nursing process and how clinical diagnosis is performed. Students will learn to assess the client's physical, psychological, social, and spiritual dimensions as a foundation to nursing care. The skills of interviewing, documentation, inspection, percussion, palpation, and auscultation are refined to make clinical judgments and promote health/client outcomes. Lecture -2 hours; Clinical -1 hour. This course is normally offered in the fall semester.

## 2013 FUNDAMENTALS OF NURSING

Prerequisites: BIOL-1013, CHEM-1104, BIOL-2523, NURS-2003
Corequisite: BIOL-2623.
An introductory course emphasizing nursing skills and nursing process. Nursing theory and concepts related to the human response to illness will be explored. Emphasis is placed on the development and integration of therapeutic communication skills, nurse/client relationships, developmental needs, cultural diversity and legal/ethical issues. Lecture - 2 hours, Clinical - 1 hour. This course is normally offered in the spring semester.

## 2033 PHARMACOLOGY

Prerequisites: BIOL-1013, BIOL-2523 and CHEM-1104
Corequisite: BIOL-2623.
Course is designed as an introduction to pharmacological principles, drug classifications, and expected therapeutic outcomes associated with drug therapy. Nursing process and drug therapy are discussed in relation to clients' developmental levels and health habits across their lifespan. Lecture - 3 hours. This course is normally offered in the spring semester.

## 3013 PATHOPHYSIOLOGY

Prerequisites: Admission to the nursing program.
A course studying the alterations in physiological well-being across the lifespan as pathological responses to disease, stress, genetics, and environmental changes occur within the body. Critical thinking, research findings, and scientific knowledge are applied to analyze individual outcomes throughout the course. Lecture -3 hours. This course is normally offered in the fall semester.

## 3014 MENTAL HEALTH NURSING

Prerequisites: Admission to the nursing program
A course introducing the student to basic mental health nursing content as applied to individuals, families, and community groups. Through the application of the nursing process, students learn to provide complex therapeutic nursing interventions for a variety mental health disorders. Continued development of communication skills, professionalism, teaching/learning principles, ethical/legal, and economic issues are incorporated throughout the course. Lecture -2 hours; Clinical -2 hours. This course is normally offered in the fall semester.

## 3015 ADULT NURSING I

Prerequisites: Admission to the nursing program.
A course focusing on medical-surgical nursing care of culturally diverse adult patients across the life span who are experiencing chronic health problems and end-of-life issues.

The concept of caring is emphasized with a focus on individuality and cultural diversity. Implementation of the nursing process in a health care setting will focus on using basic teaching-learning principles for practice. Lecture - 3 hours; Clinical -2 hours. This course is normally offered in the fall semester.

## 3024 MATERNAL-INFANT HEALTH NURSING

Prerequisites: NURS-3013, NURS-3014, and NURS-3015
A course focusing on concepts and implementation of professional nursing care for women in their childbearing years, newborns, and their families with emphasis on pregnancy, childbirth, and postpartum period. This course encompasses knowledge of growth and development, cultural diversity, and assessment techniques for pregnant women and newborns. Lecture 2 hours; Clinical - 2 hours. This course is normally offered in the spring semester

## 3025 ADULT NURSING II

A course which builds upon the medical-surgical concepts learned in Adult I, focusing on adult patients experiencing common acute and chronic health problems across the lifespan. The effects of families and community groups are to be examined. Through application of the nursing process, students learn to provide complex therapeutic nursing interventions while using critical thinking skills. Lecture - 3 hours; Clinical -2 hours. This course is normally offered in the spring semester.

## 3034 HEALTH CARE MISSIONS AND CHRISTIAN SERVICE

Prerequisites: NURS-3013, NURS-3014, and NURS-3015.
A course designed to focus on Christian concepts and principles as applied to global health service. Participation in health care delivery system of selected communities or countries is an integral component. Lecture -2 hours; Clinical -2 hours. This course is normally offered in the spring semester with clinical hours being completed in the first 3 weeks of May.

## 4005 COMMUNITY HEALTH NURSING

Prerequisites: Senior standing in nursing.
A course focusing on organization and delivery of nursing care to individuals, families, and groups in a variety of community health care settings. Emphasis is placed on prevention of disease, health promotion, and control of communicable disease within the community. Lecture -3 hours; Clinical - 2 hours. This course is normally offered in the fall semester.

## 4011 CAPSTONE IN NURSING

Prerequisites: NURS-4005, NURS-4015, and NURS-4022.
A synthesis course within the nursing program preparing the student for licensure. Students develop an outcome report of their learning experiences which combine theory content and computer technology. National achievement exams will be an integral component of this course in preparation and review for NCLEX. Lecture - 1 hour. This course is normally offered in the spring semester.

## 4015 CHILD AND FAMILY HEALTH NURSING

Prerequisites: Senior standing in nursing and MATH-2913 and PSYC-3523. A course focusing on concepts of professional nursing care and implementation of the nursing process with pediatrics and their families. Emphasis of developmental variances, cultural diversity, family dynamics, and pathophysiology of childhood diseases are incorporated throughout the course. Lecture - 3 hours, Clinical - 2 hours. This course is normally offered in the fall semester.

## 4022 ISSUES AND TRENDS IN NURSING

Prerequisites: Senior standing in nursing.
A theory course which addresses moral, ethical, and legal issues within the nursing profession. The student's transition into professional nursing practice will be addressed including career planning and the student's professional role for future practice. Lecture -2 hours. This course is normally offered in the fall semester.

## 4024 LEADERSHIP AND MANAGEMENT IN NURSING

Prerequisites: NURS-4005, NURS- 4015, and NURS-4022.
An introduction to the concepts of leadership and management principles related to nursing practice for preparation for role transition from student to graduate. This course includes a concentrated senior precepted clinical experience ( 90 hours) in a selected practice area. Lecture - 2 hours; Clinical - 2 hours. This course is normally offered in the spring semester.

## 4025 ADULT NURSING III

Prerequisites: NURS-4005, NURS-4015, and NURS-4022.
A course focusing on nursing care of adult patients across the lifespan in the critical care setting who are experiencing complex, multi-system health problems and lifethreatening illness or injuries. Emphasis is placed on interdisciplinary collaboration and on psychological, cultural, social, economic, and spiritual concerns of patients and their families. Advanced technology, assessment skills, and collaborative practices are explored. Lecture -3 hours; Clinical -2 hours. This course is normally offered in the spring semester.

## 4033 NURSING RESEARCH AND EVIDENCE BASED PRACTICE

Prerequisites: NURS-4005, NURS-4015, NURS-4022, and MATH-2913 or BIOL-2913 An introduction to the research process and its application to nursing practice. Emphasis on the role of the professional nurse in critiquing and use of nursing research. Critical thinking skills and the research process are applied to the development of a group research project. Lecture -3 hours. This course is normally offered in the spring semester.

## NUTRITION AND EXERCISE SCIENCE (NESP)

## 1013 INTRODUCTION TO EXERCISE SCIENCE

An overview of the field of exercise science. Exercise physiology, testing, prescription, sports nutrition, and biomechanics are all introduced in this course. A large focus of the course is the overall evidence regarding the long-term heaahh coolth benefits of physical activity. Finally, careers in exercise science are discussed. This course is normally offered in the spring semester.

## 2123 PUBLIC HEALTH NUTRITION AND MISSIONS

Prerequisite: BIOL 2033, Sophomore standing
A discussion and experience of public health nutrition issues both domestically and internationally. Students learn useful skills such as assessment of populations, nutrition education program planning, implementation and evaluation. Other areas of emphases are current data regarding nutrition and health from populations of people worldwide as well as basic knowledge of principles of epidemiological research. This class requires a service or field work experience, either locally or internationally. This course is offered in the spring semester.

## 3004 SCIENCE OF FOOD

Prerequisite: BIOL 2033
A general study of the functional properties of food and how they can be manipulated to yield a desired nutritional or sensory outcome. The goal of this class is to equip students with a basic working knowledge of the science of food. Sensory, physical, and chemical properties of different foods and food preparation techniques are discussed, as well as underlying functions of food ingredients and recipe modification. This course is normally offered in the Fall semester.

## 3013 LIFESPAN NUTRITION

Prerequisite: BIOL-2033
A survey of nutritional needs and how they change throughout the different stages of life As many nutrition courses by default focus on individuals age 18-55, this course spends necessary time on pregnancy, maternal nutrition, young children, and older adults. This course is normally offered in the spring semester.

## 3023 BIOMECHANICS

Prerequisite: PHYS-1114, NESP-1013
Attention is given to the mechanical and anatomical aspects of human movement across modalities of exercise and physical activity. The class applies kinematic and kinetic principles to the analysis of human movement. A particular focus of this class would be injury prevention through utilization of proper biomechanics. This course is normally offered in the fall semester.

## 3033 EXERCISE TESTING AND PRESCRIPTION

Prerequisite: NESP-1013
A concentration on the principles of exercise testing and prescription in healthy individuals, athletes, at-risk individuals, and patients with cardiovascular and metabolic diseases. Specific practical outcomes that are given attention are tests that are commonly used in clinical and elite athletic environments. This course is normally offered in the spring semester.

## 3233 EXERCISE PHYSIOLOGY

Prerequisite: NESP-1013, BIOL-2244, BIOL-3224
An in-depth examination of human physiology, at rest and during exercise. Areas of specific focus are the cardiovascular, cardiorespiratory, and muscular systems and how each manages the physiologic stress of exercise at various intensities. Other areas of attention are exercise physiology in the context of health and disease, training adaptation, and limitations to exercise tolerance. This class is normally offered in the spring semester.

## 3231 EXERCISE PHYSIOLOGY LAB

-Prerequisite: NESP-1013, BIOL-2244, BIOL-3224
This course provides students with the opportunity to use and experience various test and measurement equipment relevant to the exercise physiology field. Specifically, the equipment used will be to measure acute exercise responses and performance values pertaining to the following fitness components: Cardiovascular/cardiorespiratory, muscular strength, muscular endurance, flexibility , and body composition. Concurrent enrollment in NESP-3233 is required. This class is normally offered in the spring semester

## 3123 HEALTH ISSUES

Prerequisite: BIOL-2033, NESP-1013, Junior standing
This course addresses current diseases with high mortality rates (e.g. vascular disease, cancer, stroke, type 2 diabetes), in addition to other chronic issues such as Rheumatoid arthritis and Parkinson's disease. The course also dedicates substantial time to examining evidence with regard to nutrition and exercise's effect on or relationship with these conditions. The primary goal of this course is to give students a working knowledge of the causes and mechanisms of prevalent health conditions, and how nutrition and exercise relates to these issues. This course is normally offered in the fall semester.

## 4123 NUTRIENT METABOLISM

Prerequisite: BIOL-2033, CHEM-3115, BIOL-4014
A discovery of the mechanisms behind the conversion of food to the energy and building blocks necessary to facilitate bodily functions. Areas of emphases are: 1) the coordinated processes of digestion, absorption, transport, and metabolism of nutrients;
2) major metabolic pathways used to harvest energy from food; and 3) crucial roles of macronutrients and micronutrients in the body. This course is normally offered in the spring semester

## 4133 NUTRITION AND EXERCISE

Prerequisite: NESP-3114, NESP- 4123
An in-depth study of the relationship between nutrition and exercise. There are two primary areas of emphasis in this course: 1) the processes of nutrient metabolism and how they are modified during exercise in humans; and 2) nutrition strategies for optimizing exercise and athletic performance. This course is normally offered in the fall semester.

## 4443 CAPSTONE IN NUTRITION AND EXERCISE SCIENCE

Prerequisite: Advisor permission
The purpose of this senior-level course is for students to integrate the knowledge gained throughout their studies in NES in a practical and professionally-relevant way. Students spend a large part of the semester on a "culminating experience", a project of their choosing that synthesizes material learned in their undergraduate experience and apply it to a real problem or question. This class is normally offered in the spring semester.

## PHYSICS (PHYS)

## 1114 COLLEGE PHYSICS I

Prerequisite: MATH-1213 with a grade of "C" or better.
A study of classical and Newtonian mechanics, including kinematics, forces, energy and momentum conservation, rotation and equilibrium, as well as fluids, vibrations, wave motion, and thermodynamics. Lecture - 3 hours; Laboratory -3 hours. This course is normally offered in the fall semester.

## 1214 COLLEGE PHYSICS II

Prerequisite: PHYS-1114 with a grade of "C" or better.
Continuation of PHYS-1114, studying electricity and magnetism, light and optics, special relativity, and atomic and nuclear physics. Lecture - 3 hours; Laboratory -3 hours. This course is normally offered in the spring semester.

## 2514 PHYSICS I

Prerequisite: MATH-2114 with a grade of "C" or better.
A calculus-level treatment of classical mechanics; i.e., motion, force, work, energy, gravity, rotation, torque, elasticity, equilibrium, and thermodynamics. Lecture - 3 hours; Laboratory - 3 hours. This course is normally offered every semester.

## 2614 PHYSICS II

Prerequisites: PHYS-2514 and MATH-2214 with a grade of "C" or better.
A continuation of PHYS 2514, providing a calculus-level treatment of electricity, magnetism, alternating current, light and optics. Lecture - 3 hours; Laboratory - 3 hours. This course is normally offered every semester and summer.

## 3313 MODERN PHYSICS

Prerequisite: PHYS 2614 with grade of "C" or better.
A study of special relativity, origins of quantum theory, Schroedinger equation, and applications to physical systems such as electrons, atoms, and molecules. Lecture -3 hours. This course is offered as needed.

## 4900 INDEPENDENT STUDY IN PHYSICS

Assigned research, readings, and reports based on the needs of the individual student. May be taken only with the permission of the instructor and the departmental chair. This course Is offered as needed.

## POLITICAL SCIENCE (POLS)

## 2113 INTRODUCTION TO AMERICAN GOVERNMENT

A survey of the rules (the Constitution), institutions (the Presidency, Congress, the courts, and the bureaucracy), participants (voters, parties, interest groups, and the media), and products (social, economic, and foreign policy) of democratic politics in the United States. This course is normally offered in every semester.

## 2213 INTRODUCTION TO GLOBAL POLITICS

A survey of why countries cooperate in maintaining national security and economic prosperity in a global economy, and how conflicts between countries threaten that security and prosperity. Students participate in several decision-making simulations that demonstrate the challenge of maintaining peace and security. This course is normally offered in the spring semester of even-numbered years.

## 2313 RESEARCH SKILLS IN POLITICAL SCIENCE

Prerequisite: POLS-2113 or POLS-2213.
A survey of several methods of conducting original research projects, which may include survey research, experiments, content analysis, statistical analysis, and case studies. Students learn to identify research questions, to formulate strategies for answering them, to conduct the research, and to write up the results. This course is normally offered in the spring semester of even-numbered years.

## 2413 COMPARATIVE POLITICS

A survey of the major political systems, levels of government and inter-governmental
relations, mass political behavior, and theoretical power relationships inside various regimes. It will involve an analysis of comparative political concepts with an emphasis on industrialized countries, not including the U.S. This course is normally offered in the spring semester of odd-numbered years.

## 2513 DATA ANALYSIS

Prerequisite: POLS-2113 or POLS-2213.
Survey of methods and approaches to the study of politics and their underlying assumptions as they apply to the major concepts of the discipline. An introduction to political data sources, their strengths and weaknesses, and uses in research. The course is normally offered in the spring semester of odd numbered years

## 3113 HISTORY OF WESTERN POLITICAL THOUGHT

Prerequisite: POLS-2113 or POLS-2213.
The course of political thought in the West from Plato and Aristotle to Dewey, Freud, and Russell. This course is offered as needed.

## 3213 AMERICAN POLITICAL THOUGHT

Prerequisite: POLS-2113 or POLS-2213.
A study of American political ideas, political thinkers, and the classic texts of American political thought from colonial times to the present in their historical context. Special attention will be given to the influence of Calvinism, the Enlightenment, Romanticism, Social Darwinism, pragmatism, Anti-Communism, postmodernism, and contemporary liberalism and conservatism. Same HIST-3213. This course is normally offered in the fall semester of even-numbered years.

## 3313 LEGAL AND LEGISLATIVE ANALYSIS

Prerequisites: Sophomore standing and POLS-2113.
A workshop format teaching the analysis of statutory and case law in the United States. Workshop topics include briefing cases, researching cases and statutes, writing legal memos, writing legal outlines, and taking hypothetical case exams. Developing these skills is excellent preparation for law school. This course is normally offered in the spring semester of even-numbered years.

## 3413 THE PRESIDENCY AND CONGRESS

Prerequisite: POLS-2113.
A survey of the internal operation of the two major branches of the national government, especially in the context of foreign policy and making the national budget. A second major issue is the impact of partisanship on presidential-congressional relations and public policy. This course is normally offered in the spring semester of even-numbered years.

## 3513 INTERNATIONAL POLITICAL ECONOMY

Prerequisite: POLS-2213.
A survey of the organizations and the institutions that govern international trade and finance, controversies involving free trade, tensions between developed and developing countries, and the linkages between global capitalism and war. This course is normally offered in the spring semester of even-numbered years.

## 3613 POLITICAL PARTIES AND INTEREST GROUPS

Prerequisite: POLS-2113.
An examination of the role of political parties and interest groups as intermediary organizations that connect the public to policy makers. The first part of the course focuses upon political parties and elections, and the second part of the course examines lobbying, political action committees (PAC's), and the problem of political corruption. This course is normally offered in the fall semester of odd-numbered years.

## 3713 STATE AND LOCAL POLITICS

Prerequisite: POLS-2113.
A survey of the local politics and policies that most people directly encounter in daily life. Students learn the basic institutional structures and municipal governments in the United States and explore local controversies involving education, land use, and economic development. Students implement different theories of local government in a computer simulation. This course is normally offered in the fall semester of even-numbered years.

## 3813 CONTEMPORARY POLITICAL IDEOLOGIES

This course is a study of the political patterns of today's world, explaining the instruments, functions, and theories intertwined in modern ideologies. Emphasis will be placed on the predominant theories of democracy, communism, and the aspects of an authoritarian regime. This course is normally offered in the fall semester of even-numbered years.

## 4113 CONSTITUTIONAL LAW

Prerequisite: POLS-1213 or POLS-2113.
A study of current public law and constitutional law court cases which acquaint the student with official interpretation of the Constitution and the lawmaking and judicial role of the Supreme Court. This course is normally offered in the spring semester of odd-numbered years.

## 4213 THEORIES AND ETHICS IN INTERNATIONAL RELATIONS

This course will examine three major themes relevant to ethics and international affairs: the discussion of contemporary theories regarding the nature of the international system, the problem of morality in the anarchical international system, and the ethical dimension of contemporary issues. This course is normally offered in the fall semester of odd-numbered years.

## 4413 INTERNATIONAL CONFLICT

Prerequisite: POLS-2113 or POLS-2213
An examination of the causes of conflict, the ethics of conflict, conflict management, and conflict resolution. The first section of the course will discuss the causes and ethics of violence while concentrating on riots, terrorism, revolution, and other expressions of conflict. The second section of the course will examine interstate conflict, including war. The course readings are interdisciplinary and include some sociology, psychology, anthropology, and history. This course is normally offered in the spring semester of oddnumbered years.

## 4713 POLITICAL RESEARCH SEMINAR

A capstone seminar giving political science majors the opportunity to further develop their research skills by delving into the world of political data analysis. Students will work closely with faculty to create, develop, and produce a significant research project in preparation for graduate school. This course is offered in the fall semester of even numbered years.

## 4813 SELECTED TOPICS IN POLITICAL SCIENCE

The contents of this course vary based on the needs of students and the current central issues in political science. Course may be repeated. This course is offered as needed.

## 4900 INDEPENDENT STUDY IN POLITICAL SCIENCE

Provides mature students an opportunity for individual research and guided readings. (1-3 hours) This course is offered as needed.

## PSYCHOLOGY (PSYC)

## 1113 GENERAL PSYCHOLOGYI

An introduction to the fundamental aspects of modern scientific psychology. Included in the study are the history of psychology, methods used in the field, learning theory, motivation, emotion, and mental disorders. The student is stimulated to apply psychological principles to life situations. This course is normally offered every semester.

## 1211 INTRODUCTORY SEMINAR IN PSYCHOLOGY

A course which introduces the psychology major to the field of psychology as a career.
Major emphasis is placed on preparation for graduate school, taking the Graduate Record Exam (GRE) and the different career options within the field of psychology. Guest speakers are utilized. This course is normally offered in the spring semester.

## 2223 GENERAL PSYCHOLOGY II

Prerequisite: PSYC-1113.
Second introductory class for the field of psychology. This course is primarily for majors or minors in psychology and includes units on social psychology, human learning, remembering and forgetting, testing, the brain, and psychological therapy. The course completes the student's preparation for upper level psychology courses. This course is normally offered in the spring semester.

## 3113 INTRODUCTORY PSYCHOLOGICAL STATISTICS

Elementary statistics with social and behavioral applications. Same as SOCI-3113. This course is normally offered in the fall semester.

## 3213 ADVANCED PSYCHOLOGICAL STATISTICS

Prerequisite: PSYC-3113.
An intermediate course exploring the application of more advanced statistical methods used in research in psychology and related fields. Emphasis will be placed on the major concepts of the methods and on the practical application of these statistics. Specific topics covered are factorial analyses of variance, including repeated measures design and post hoc analyses, linear and multiple regression, analysis of covariance and non-parametric statistics including chi-square and log linear analyses. This course is normally offered in the spring semester.

## 3313 ABNORMAL PSYCHOLOGY

Prerequisite: PSYC-1113.
A study of the definition, diagnosis and treatment of abnormal behavior. This course is normally offered in the spring semester.

## 3413 SOCIAL PSYCHOLOGY

Prerequisite: PSYC-1113.
A study of behavioral consequences of group and individual interaction. Same as SOCI3413. This course is normally offered in the fall semester.

## 3523 DEVELOPMENTAL PSYCHOLOGY

Prerequisites: PSYC-1113.
The physical, mental, and social development of the normal individual from conception through adolescence. This course is normally offered every semester, including summers.

## 3524 DEVELOPMENTAL PSYCHOLOGY: A LIFESPAN APPROACH

Prerequisite: PSYC-1113 and admission to Teacher Education or special approval.
The physical, mental, and social development of the normal individual from conception through death and dying. This course is normally offered every semester.

## 3613 ADOLESCENCE AND EARLY ADULTHOOD

Prerequisite: PSYC-1113.
A study of the developmental process of adolescence and early adulthood. It will focus on biological, cognitive, and socio-emotional issues as they pertain to the ongoing changes in this time of the life cycle. Attention will be given to issues of gender, culture, family relationships, peer relationships, sexuality, and education. Special attention will also be given to issues that young adults face as they venture into collegiate life, career exploration, and new family roles. Same as FMST-3613. This course is normally offered in the fall semester of odd numbered years.

## 3713 PERSONALITY

Prerequisite: PSYC-1113.
Structure and dynamics of personality development. This course is normally offered in the spring semester.

## 3723 ADULT DEVELOPMENT AND AGING

A study to include physical and health factors in aging; psychological aspects of aging; marriage, family and community relationships of older persons; economic and vocational factors in aging; perspectives on death, dying and grief; aging and institutional care; aging and the law; and the future of social intervention, both public and private.
Same as FMST-3723 and SOCI-3723. This course is normally offered in the spring semester of even numbered years.

## 3813 THEORIES OF COUNSELING AND PSYCHOTHERAPY

Prerequisite: PSYC-1113.
An introduction to the major theories of counseling and psychotherapy. Focus will be placed on understanding the theories of Freud, Adler, Jung, Rogers, Perls, Ellis, and Glasser, and on appreciating the complexity of helping others in a counseling relationship. This course is normally offered in the spring semester of odd numbered years.

## 3913 PSYCHOLOGY OF CRIME

Prerequisite: PSYC-1113.
Psychological aspects of criminal and anti-social behavior, including comparison of psychological and legal factors in criminal investigation and testimony. Same as SOCI-
3523. This course is normally offered in the spring semester of odd numbered years.

## 3933 CYBERNETICS AND SYSTEMS THEORY

Prerequisite: PSYC-1113.
An introduction to the major underlying theoretical foundations of family therapy. The course will explore the historical development of systems theory and cybernetics from its origins in the 1940s in the thinking of mathematicians, physicists, biologists and engineers to the pioneering work of Bateson and his colleagues in the late '50s and their application of cybernetics to the family. The course will cover the work of Murray Bowen. The basic concepts of systems theory will be discussed and contrasted with the more common Western, analytical approach that has dominated thinking in psychology since the time of Freud. Same as FMST-3933. This course is normally offered in the fall semester of odd numbered years.

## 4113 MOTIVATION AND EMOTION

Prerequisites: PSYC-2223 and PSYC-3013.
Theoretical analysis of purposive behavior drives and motives as well as biological and social origins. This course is normally offered in the spring semester of even numbered years.

## 4213 PSYCHOLOGY OF LEARNING

Prerequisite: PSYC-1113.
The study of experimental psychology in the learning situation. This course is normally offered in the fall semester of even numbered years.

## 4313 ORGANIZATIONAL BEHAVIOR

Prerequisite: PSYC-1113.
Psychology of employee selection, training, proficiency evaluation, motivation, morale, and reaction to working conditions. Same as MGMT-4313 and SOCI-4313. This course is normally offered in the spring semester.

## 4323 INTRODUCTION TO MARITAL AND FAMILY THERAPY <br> Prerequisite: PSYC-1113.

An introduction to the field of marital and family therapy. It will present the history of systems therapy, including the importance of systems theory to the continuing development of the discipline. Special emphasis will be placed on the current status of marital and family therapy including the importance of constructivist theories. The course will also present the major theories of marital and family therapy that have defined the field for the last 40 years. This will be a systemic, experiential, discussion-based class that will require active participation from each student. Same as FMST-4323. This course is normally offered in the spring semester of even numbered years.

## 4413 BIOLOGICAL PSYCHOLOGY

Prerequisite: PSYC-1113.
A study of the nervous system and other physiological correlates of behavior. This course is normally offered in the fall semester of odd numbered years.

4423 DRUGS AND PSYCHOPHARMACOLOGY
Prerequisite: PSYC-1113.

An advanced course in biological psychology, focusing on the effects of drugs on the human nervous system. It will explore drugs of abuse, emphasizing how these drugs work in the brain to produce their behavioral effects. Special attention will be given to the topic of addiction. The course will also focus on psychopharmacology, specifically the treatment of mental health disorders via the prescribing of psychoactive agents. The course will focus on the treatment of anxiety disorders, mood disorders, and psychotic disorders through medication. Attention will be given to how these drugs work in the brain. This course is normally offered in the fall semester of even numbered years.

## 4613 INTRODUCTION TO PSYCHOLOGICAL TESTING

Prerequisite: PSYC-2413.
An overview of the theory and content of evaluation instruments commonly used in fields of psychology to assess achievement, intelligence, special aptitudes, and personality. General principles of construction, validation, administration, scoring, and interpretation are covered along with brief descriptive overviews of widely used instruments. This course is normally offered in the spring semester of odd numbered years.

## 4623 EXPERIMENTAL PSYCHOLOGY

Prerequisite: PSYC-2413.
Planning, executing, analyzing data, and writing up results of psychological research projects. Methods and problems encountered are explored. This course is normally offered in the fall semester.

## 4653 RESEARCH SEMINAR

Prerequisite: PSYC-4623.
The capstone course in the psychology program and a follow-up to Experimental Psychology (PSYC-4623). Students will learn SPSS - the Statistical Package for the Social Sciences - and complete their own individual research project and paper, including the collection and analysis of data. The final goal will be making a presentation of their findings to the appropriate student convention. Much of the class will consist of individual instruction and laboratory work. Same as FMST-4653. This course is normally offered in the spring semester.

## 4713 HISTORY AND SYSTEMS IN PSYCHOLOGY

Prerequisite: PSYC-1113.
A comprehensive study of the history of psychological thought beginning with philosophical foundations and continuing to the present. The course focuses on major contributions and systems with which they are associated. This course is normally offered in the fall semester of even numbered years.

## 4733 PROFESSIONAL, ETHICAL, AND LEGAL ISSUES

Prerequisite: Senior standing.
A study of the contemporary ethical considerations, legal standards, and professional issues that influence the work of psychologists, counselors, and other mental health officials. Specific attention will be given to the Ethical Standards of the APA, ACA and AAMFT, as well as Oklahoma State Law governing the behavior of researchers and psychotherapists. The course will focus on specific ethical dilemmas throughout the class, including, among others, confidentiality, dual relationships, professional relationships, assessment, and research. Same as FMST-4733. This course is normally offered in the fall semester of odd numbered years.

## 4810 PSYCHOLOGY SEMINAR

Prerequisite: PSYC-1113.
Content varies. Course may be repeated. (1-4 hours, depending on course content.)

## 4820 PRACTICUM IN PSYCHOLOGYI

A course designed to give advanced psychology students "hands on" experience in the field of psychology of interest to them. Students complete 60 hours of supervised volunteer work at a field site and meet one hour a week with a supervising instructor and other practicum students. Class time focuses on student experiences in a group discussion format. Possible practicum sites include schools and community social service agencies, along with opportunities for research. Enrollment by permission only. (1-3 hours) This course is normally offered in the spring semester.

## 4830 PRACTICUM IN PSYCHOLOGY II

Requirements are the same as Practicum I. Students have the option of continuing in the same practicum setting or switching to another site. (1-3 hours) This course is normally offered in the spring semester.

## 4900 INDEPENDENT STUDY IN PSYCHOLOGY

Assigned research, readings and reports based on the needs of the individual student. May be taken only by junior or senior psychology majors or minors with approval of the departmental chair. (1-3 hours) This course is normally offered in the spring semester.

## SOCIOLOGY (SOCI)

## 1113 PERSPECTIVES IN SOCIOLOGY

A survey of the following areas: society and culture, personality, social processes, human collectivities, population and communities, social institutions, and social change. This course is normally offered as needed.

## 2423 PARENT-CHILD RELATIONS

Opportunities, responsibilities and problems faced by parents in guiding the development of children, emphasizing recent research in the area of parent-child relationships. Same as

FMST-2423. This course is normally offered in the spring semester.

## 3113 SOCIAL STATISTICS

Elementary statistics with social and behavioral applications. Same as PSYC-3113. This course is normally offered in the fall semester.

## 3143 INTRODUCTION TO ASIAN CIVILIZATIONS

## Prerequisite: Junior standing

Introduces the major cultural themes of East, Southeast, and South Asia. Students will learn about the geographical, social, political, economic, cultural and religious features of the four major regions of Asia. Fulfills the core curriculum non-Western Civilization requirement. Same as MISS-3143. This course is offered as needed.

## 3413 SOCIAL PSYCHOLOGY

Prerequisite: PSYC-1113.
Motivation and personality in social context. Same as PSYC-3413. This course is normally offered in the fall semester.

## 3513 WORLD RELIGIONS

Prerequisite: Junior standing
A comparative study of the beliefs and practices, as well as the historical and sociological impact, of several of the world's principal religious traditions. These include indigenous traditions, Judaism, Islam, Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Fulfills the core curriculum non-Western civilization requirement. Same as MISS-3513. Nontextual. This course is normally offered every semester.

## 3523 SOCIOLOGY OF CRIME

Prerequisite: PSYC-1113
Psychological aspects of criminal and anti-social behavior, including comparison of psychological and legal factors in criminal investigation and testimony. Same as PSYC-
3913. This course is normally offered in the spring semester of odd numbered years.

## 3613 CULTURAL ANTHROPOLOGY

A course that is designed with the intent of enhancing students' cultural intelligence, specifically in terms of understanding cultural diversity and functioning more effectively in culturally diverse contexts. A significant component of the course is devoted to the study of the anthropology of religion. This course fulfills the non-Western civilization requirement in the Core Curriculum. Same as MISS-3613. This course is normally offered every spring semester.

## 3673 NEW RELIGIOUS MOVEMENTS

This course examines both religious and quasi-religious teachings and practices in a variety of newer religious movements of diverse cultural and philosophical origins. This course fulfills the non-Western civilization requirement in the Core Curriculum. Same as MISS-3673 and SOCI-3673. This course is offered as needed.

## 3713 CONTEMPORARY ETHICS

A brief history of ethical theory in Western civilization and a survey of several modern secular ethical systems. These are contrasted with biblical principles and Christian systems during discussions of specific topics such as sexuality, marriage, divorce, abortion, euthanasia, the relation of Christians to the state, wealth and poverty, war and peace, race relations, and social justice. Same as BIBL-3713. This course is normally offered in the fall semester of odd numbered years.

## 3723 GERONTOLOGY

A study to include physical and health factors in aging; psychological aspects of aging; marriage, family and community relationships of older persons; economic and vocational factors in aging; perspectives on death, dying and grief; aging and institutional care; aging and the law; and the future of social intervention, both public and private. Same as FMST3723 and PSYC-3723. This course is normally offered every other spring.

## 4633 INTERCULTURAL COMMUNICATION I

Prerequisite: ENGL-1213.
A survey of the basic concepts of how people communicate effectively across cultural boundaries, with special attention given to the complex nature culture plays in communication. SOCl-4633 fosters in students an understanding and appreciation of their own culture and cultural patterns of communication and those of other cultures. Same as COMM-4633, ENGL-4633 and MISS-4633. This course is normally offered in the spring semester of odd numbered years.

## 4643 INTERCULTURAL COMMUNICATION II

Prerequisite: ENGL-1213.
A continuation of SOCl-4633, typically taught while a student is living in a foreign culture. Same as ENGL-4643 and MISS-4643. This course is normally offered in the fall semester of odd numbered years.

## SPANISH (SPAN)

## 1113 BASIC SPANISH I

Foundational principles and practice of speaking, understanding, reading, and writing
Spanish and an introduction to Spanish culture for those with no background in Spanish.
This course is normally offered every semester and summer.

## 1213 BASIC SPANISH II

Prerequisite: SPAN-1113, one year of Spanish in high school or the equivalent with permission of the instructor.
Continuation of Basic Spanish I, enabling the student to read, write, understand, and respond in basic Spanish and to be aware of cultural differences. This course is normally offered every semester and summer.

## 2113 INTERMEDIATE SPANISH I

Prerequisite: SPAN-1213 or the equivalent with the permission of the instructor.
A review of Spanish grammar with extensive conversation and cultural readings. This course is normally offered in the fall semester.

## 2123 INTERMEDIATE II

Prerequisite: SPAN-2113 or the equivalent with the permission of the instructor. Guided development in spoken and written Spanish designed to increase vocabulary and improve usage. This course is normally offered in the spring semester.

## 3213 SPANISH LITERARY READINGS

Prerequisite: SPAN-2123 or the equivalent with the permission of the instructor. A survey of Spanish literature based on selected passages and short works. This course is normally offered as independent study and only by permission of the instructor.

## 3223 HISPANIC CIVILIZATION

Prerequisites: SPAN-2123 or the equivalent with the permission of the instructor.
An overview of Spanish-speaking civilizations through geography, history, art, architecture, and music. The course features lecture, discussion, and composition in Spanish. This course is normally offered in the fall semester of odd numbered years.

## 3723 METHODS OF TEFL I

Prerequisite: SPAN-2123.
An introduction to the techniques and methods of teaching English as a second language, including the development of teaching materials and participation in a mini practicum. This course is normally offered in the spring semester of odd numbered years.

## 4113 STUDIES IN SPANISH LITERATURE

Prerequisite: SPAN-2123.
A study of major authors, works, and movements in Spanish literature. This course may be repeated as the content is changed. This course is normally offered in the spring semester of even numbered years.

## 4213 STUDIES IN LATIN AMERICAN LITERATURE

Prerequisite: SPAN-2123.
A study of the major authors, works and movements in Latin American literature. This course may be repeated as the content is changed. This course is normally offered in the spring semester of odd numbered years.

## 4313 ADVANCED GRAMMAR AND COMPOSITION

Prerequisite: SPAN-2123.
A survey of the Spanish language and its grammatical system, with specific attention to those skills required for advanced language proficiency. This course is normally offered in the fall semester of even numbered years.

## 4413 ADVANCED SPANISH CONVERSATION

Prerequisite: SPAN-2123.
Guided development in oral proficiency, emphasizing pronunciation, vocabulary
development, and mastery of complex structures and public presentations. This course is normally offered as independent study and by instructor permission only.

## 4513 SPANISH LINGUISTICS

Prerequisite: SPAN-2123.
A study of the history of the Spanish language, its phonemic, morphemic and syntactical features and its dialectical applications in Spain, Latin America, and the United States. This course is normally offered every other fall semester of even numbered years.

## 4613 ADVANCED CONVERSATION AND GRAMMAR

Prerequisite: SPAN-2123.
An intense review of the grammatical concepts of Spanish with a focus on applying them in conversation and oral presentations. Pronunciation and vocabulary development will be emphasized as well. This course is normally offered every other spring semester of even numbered years.

## 4713 METHODS OF TEFL II

Prerequisite: SPAN-2123.
Survey of methods and philosophies of teaching English as a second language. Attention to Second Language Acquisition research makes this course appropriate for teaching other foreign languages besides English. This course is normally offered in the spring semester of even numbered years.

## 4711 SPANISH IMMERSION LAB

Prerequisite: SPAN-2123, four years of high school Spanish or the equivalent with permission from the instructor.
An intense Spanish conversation and Hispanic culture course. This course is normally offered every semester.

## 4813 TOPICS IN HISPANIC LITERATURE I, II OR III

Three advanced, in-depth self-paced studies of a particular area of Spanish history literature offered on a rotating basis, one per summer.

## 4900 INDEPENDENT STUDY

A reading, research or writing project related to a student's special interest or need. May be taken only by juniors or seniors with approval of the departmental chair. This course is offered as needed.

Retroactive Credit for Foreign Language - See page 21.

## SPORTS MANAGEMENT (SPMG)

## 3313 PRINCIPLES AND PRACTICES OF SPORT ADMINISTRATION

This course provides a study of the organization and administration within professional, commercial, recreational, interscholastic, and intercollgiate sports industry contexts. It investigates how business principles are applied in sport organizations and explores how Christian theology can and should influence the practice of sports administration. This course is normally offered in the spring semester.

## 3413 MANAGING SPORT ORGANIZATIONS

This course focuses on the foles and responsibilites of the sport manager and the application of foundational management theories in the context of a sport organization. Students gain an understanding of how to effectively organize, plan, control, and lead an organization in the sport industry. Topics include information technology and the sports media, strategic planning in sports, operational planning and control of the sports organization, organization design and the sports agency, decision making in sports organization, motivation and leadership, and human resource management. This course is normally offered in the fall semester.

## 3513 SPORTS IN SOCIETY

Explores and develops knowledge about the sociological impact if sports and entertainment across genders, ethnicities, religions, and disabilities, including the roles played by athletes, coaches, administrators, and fans. Students learn to identify and understand the internal and external factors that shape sports and entertainment in a culture and understand how sports and entertainment mirror the socities in which they exist. This course is normally offered in the fall semester.

## 4113 LEGAL ASPECTS OF SPORTS

Prerequisite: JR standing or Instructor approval.
This course extends the understanding of business law concepts in an overview of legal issues that affect various sport industries. Students will become familiar with agencies governing professional professional, collegiate, high school, and amatuer level sports. Students will also investigate liability and contract law related to the sport industry and explore collective bargaining agreements in relation to labor law. This course is normally offered in the fall semester.

## 4213 FACILITY DESIGN AND EVENT PLANNING

Prerequisite: JR standing or Instructor approval.
This course examines the concepts and principles involved in planning, designing, and operating athletic facilities and the events held in those facilities. This course delves into the budgeting and financials of facility concession and sports merchandising, and surveys the components of new facility design and planning, overall layout and traffic flow, and the possibilities of expansions/renovations in existing venues. Market resources are utilized as real-world examples through tours of sports facilities. This course is normally offered in the fall semester.

## 4313 SPORTS AND SOCIETY

Prerequisite: JR standing or Instructor approval.
This course explores and develops knowledge about the sociological impacts of sport and entertainment across genders, ethnicity, religions, and disabilities, including the roles played by athletes, coaches, administrators, and fans. Students leanr to identify and understand internal and external factors that shape sport and entertainment in a culture and understand how sport and entertainment mirrors the society in which it exists. This course is normally offered in the spring semester.

## 4993 SPORTS MANAGEMENT PRACTICUM

This course provides an opportunity for students to gain valuable insight into actual business operations in order to correlate academic experience with professional experience. The practicum consist of field work in an area of interest, providing learning experiences and career preparation through network connections and the acquisition of new skills transferable to future employment. This course is offered as needed.

## SPORT WELLNESS AND RECREATION (SPWR)

## 1301-1391 INTERCOLLEGIATE SPORTS

Instruction, practice, and participation in the intercollegiate sports sponsored by the university. These are activity courses.

## 1113 INTRODUCTION TO SPORT, WELLNESS, AND RECREATION MANAGEMENT

This course introduces prospective majors to all phases of the field. This course is normally offered in the fall semester.

2312 FIRST AID
A study in the immediate care of persons involved in various types of emergencies. This course is normally offered in the spring semester.

## 2412 CARE AND PREVENTION OF ATHLETIC INJURIES

A course designed for students planning to coach varsity sports. Topics include common injuries and types of treatment for which each coach must be prepared. Laboratory work is required. This course is normally offered in the fall semester.

## 2512 WELLNESS CONCEPTS

This course is designed to promote lifetime fitness and wellness. This course is normally offered in the spring semester.

## 2612 SPORTS OFFICIATING

Instruction and practical experience in officiating various sports, including basketball, baseball, softball, volleyball, and football. This course Is normally offered in the fall semester.

## 2702 SPORTS LAB I

Instruction and practice in the activities of golf, soccer, and football. This course is normally offered in the fall semester. This is an activity course.

## 2712 SPORTS LAB II

Instruction and practice in the activities of badminton, volleyball, and tennis. This course is normally offered in the spring semester. This is an activity course.

## 2722 SPORTS LAB III

Instruction and practice in the activities of basketball, softball, and weight training. This course is normally offered in the fall semester. This is an activity course.

## 3113 KINESIOLOGY

Involves the study of human movement. Many forms of movement are analyzed and correlated with scientific principles of coaching various activities. This course is normally offered in the spring semester.

## 3232 THEORY OF COACHING BASKETBALL

The study of coaching principles in basketball. Practical applications such as hiring officials, pre-game situations, and personnel problems are studied. This course is normally offered in the fall semester.

## 3242 THEORY OF COACHING VOLLEYBALL

The study of coaching principles in volleyball. Techniques in proper officiating as well as rules are discussed. This course is normally offered in the fall semester.

## 3252 THEORY OF COACHING BASEBALL AND SOFTBALL

The study of coaching principles baseball and softball. Pre-season and in-season drills are studied. This course is normally offered in the fall semester.

## 3262 THEORY OF COACHING TRACK AND FIELD

The study of coaching principles in track and field events. Practical study involving the organization and administration of track meets is included. This course is normally offered in the fall semester.

## 3272 THEORY OF COACHING TENNIS AND GOLF

The study of coaching principles in tennis and golf. A practical study in blending individuals into a team and the techniques of each sport. This course is normally offered in the fall semester.

## 3282 THEORY OF COACHING SOCCER

The study of coaching principles in soccer. Offensive and defensive fundamentals will be studied. This course Is normally offered in the fall semester.

## 3293 COACHING ETHICS AND SPORTS PSYCHOLOGY

The study of current trends in coaching ethics and sport psychology. Best practices in each of these topics will be studied. This course Is normally offered in the spring semester.

## 4113 ORGANIZATION OF SPORT, WELLNESS, AND RECREATION

 MANAGEMENTA study of the organization and administration of physical education and athletic programs in the public schools. This course is normally offered in the fall semester

## 4123 RECREATION LEADERSHIP AND YOUTH SPORTS

A study of leadership qualities needed in the organization and administration of various types of recreational programs. This course is normally offered in the spring semester.

## 4323 PHYSIOLOGY OF SPORT AND EXERCISE

The study of scientific principles of coaching athletes and teaching physical education classes. This course is normally offered in the fall semester.

4411 TEACHING THE DISABLED CHILD
This class allows students to work with physically and mentally disabled students. All work
is done within a lab setting involving physical education and recreation skills. This course is normally offered every semester. This is an activity course.

4513 RECREATIONAL ACTIVITIES FOR THE DISABLED
A study consisting of practical experiences in working with the disabled in movement and recreational activities on the OC campus. This course is normally offered in the fall semester.

## 4613 CAPSTONE SKILLS

This course gives the senior Sports Wellness and Recreation Management major a 42-
hour practicum in the field. This course is normally offered every semester.

## STUDENT DEVELOPMENT (SDEV)

## 0103 INTERMEDIATE ALGEBRA

Designed for students with a math ACT score of 22 or below in preparation for one of the three mathematics courses which satisfy the university's core curriculum requirements. This course reviews high school algebra including polynomials, equation solving and graphing. This course is graded with a (P) Passing or (NP) No Passing grading system. This course does not satisfy the core curriculum mathematics requirements. This course is normally offered every semester.

## 0123 DEVELOPMENTAL WRITING

A grammar and writing course designed to develop the basic skills necessary for successful college writing. The course may be required as a prerequisite to ENGL-1113English Composition I depending on the student's ACT English verbal scores (18 \& below) or other equivalent measures. This course is graded with a (P) Passing or (NP) No Passing grading system. Students enrolled in SDEV-0123 must make a P (Passing) in order to enroll in ENGL-1113-English Composition I. Not applicable for credit in major or minor. This course is normally offered every semester.

## 0133 PREPARATION FOR COLLEGE CHEMISTRY

This course is for the student just beginning to study chemistry. Topics have been chosen to facilitate the understanding of basic concepts of chemistry to insure long term success in the study of general chemistry. Quantitative reasoning and problem solving strategies are emphasized throughout the course. It does not satisfy any core requirement. Lecture - 3 hours. This course is normally offered in the spring semester.

## 1102 PERSONAL AND PROFESSIONAL STRATEGIES FOR SUCCESS

A comprehensive course designed to assist students to maximize their success at the university and after graduation. Time management, conflict resolution, career exploration and preparation, and learning styles and strengths will be covered. In addition to in-class activities, students will participate in peer mentoring and other enhancement activities. This course is normally offered every semester.

## 2011 DISCOVERING YOUR STRENGTHS

This course is designed to serve the needs of students who have not yet chosen a college major or students who question whether or not their current major is the right one for them. This class allows students to discover more fully their strengths and interests and, as a result, to identify appropriate careers and majors it also helps students develop high performance skills such as critical thinking.

## 2113 SUCCESS IN COLLEGE AND LIFE

This course assists students in transitioning into and out of university life. The class acquaints students with techniques that encourage student success, improve and refine academic skills, and develop skills and attitudes needed to achieve educational and personal goals. This course is normally offered in the fall and spring semesters.

## 3111 LEADERSHIP SEMINAR

A study of the definitions of leadership, leadership skills, and models of leadership in scriptures, politics, and business. Practical applications of leadership principles to the OC social club system, including daily administration of the club system through Inter-Club Council (ICC). Seminar is open only to the presidents of social service clubs. This course is offered as needed.

## YOUTH MINISTRY \& FAMILY MINISTRY (YTMN)

## 2123 COUNSELING ADOLESCENTS

An introductory class of current problems that adolescents face in American culture (e.g., self-acceptance, peer pressure, friendship and dating, pregnancy, anorexia nervosa, music, drugs and drinking, and sexual acting out). The class will involve reading, listening, and dialoguing with guest speakers from the field, listening to and discussing lectures, critiquing videos, and participating in and critiquing simulations in the classroom from biblical and practical perspectives. Field visits to the juvenile court system and interviews with local youth ministers will allow students to compare classroom instruction with the real world of adolescents. A brief introduction to family systems will be included. This course is normally offered in the spring semester.

2213 INTRODUCTION TO YOUTH AND FAMILY MINISTRY AS A PROFESSION An introduction to the field of study in youth and family ministry. Emphasis will be given to the private and the professional aspects of this profession. Some private issues such as spiritual disciplines, health, family relationships, and personality type will be discussed. Professional issues centering on ethics, integrity, sexuality, education, job skills, leadership,
youth ministry tools and resources, teaching, youth and family ministry as a lifetime career, and others will be discussed as well. Concepts will be given to students to begin developing a philosophy of youth and family ministry. Field trips to different parts of Oklahoma City/Edmond will be required for students to interview people in several different contexts working in this profession. This course is normally offered in the spring semester.

## 2233 EXPERIENTIAL TEACHING METHODS IN THE OUTDOORS

An introduction to teaching adolescents using experiential teaching methods used in outdoor adventure learning. Emphasis will be given to the preparation and presentation of object lessons in the outdoors using biblical texts. Students will work in groups to plan and carry out a 2-3 day outdoor adventure. Interviews with camp directors and team building organizations will give students up-to-date experience in contemporary settings where adolescents might experience outdoor learning opportunities. This course is normally offered in the spring semester of even numbered years.

## 3113 EVANGELISM, DISCIPLESHIP, AND SPIRITUAL FORMATION WITH ADOLESCENTS

Students will study and explore methods of evangelism particularly effective with adolescents. One-on-one Bible studies, small group Bible studies, and large evangelistic group meetings will be evaluated for effectiveness in today's culture. Emphasis will be given to the process of spiritual formation within the family before and after the conversion experience. Methods of discipleship will be explored and practiced during the course Students will develop a presentation of their own faith story and work on their own continuing spiritual formation. This course is normally offered in the fall semester of odd numbered years.

## 3203 MODELS AND PROGRAMMING IN YOUTH MINISTRY

This course introduces the student to the current models of youth ministry and programming (i.e., PDYM, Cells, Relational, Young Life, FCA, Sonlife, K-Life). Philosophies of the different models will be discussed allowing the student to integrate a model(s) into his/her philosophy of ministry. Types of programming will be discussed that fit one or several of the models. Students will present a one-year program of activities and learning opportunities for adolescents using the student's chosen model and philosophy. Students will volunteer to work in a ministry that fits closely with the one(s) that they choose as a model. This course is normally offered in the fall semester of odd numbered years.

## 4113 MEDIA, CULTURE, AND ADOLESCENCE

This course will provide information and learning experiences for students in the areas of adolescent spirituality, media influence, and overall cultural influences that affect the lives of adolescents. The course will focus on how a biblically-grounded spirituality can provide answers to the issues that adolescents face in our culture today. Fowler's Stages of Faith and research from The National Study of Youth and Religion will be used as a backdrop along with scripture to develop a working profile of adolescent spirituality. The use of audio and video media as well as the special moral problems of media and the effects media has on adolescents will be examined. This course is normally offered in the fall semester of even numbered years.

4313 VOLUNTEERS, PARENTS, AND STAFF IN YOUTH AND FAMILY MINISTRY This course will equip students to carry out Ephesians 4:11-13. Effective youth and family ministry requires help. Students will learn how to recruit and train volunteers. Equipping parents to do their God-given job (Deuteronomy 6:4-9) will be given priority in the course. Relationships with paid and volunteer staff will be discussed. Students will be required to volunteer at a local church during the semester in the youth and family ministry. Same as CMIN-4313. This course is normally offered in the spring of odd numbered years.

## 4413 TEACHING THE BIBLE TO ADOLESCENTS

A study of the age characteristics, motivational principles, learning methods and curriculum for teaching the Bible to adolescents 13-18 years old. Same as BIBL-4213. This course is normally offered in the fall semester of odd numbered years.

## 4813 YOUTH MINISTRY PRACTICUM

Prerequisites: BIBL-2713, one Youth Ministry class, and at least a sophomore standing. Students will work with a local church (or other approved organization working with adolescents with a spiritual emphasis) to gain experience in practical programming for ministry to middle and/or high school students. Students will be evaluated by an approved supervisor (youth minister, preacher, elder, deacon) at the church and an assigned field supervisor from the university. This course is normally offered every semester.

## 4823 YOUTH MINISTRY-TEACHING PRACTICUM

Prerequisite: BIBL-4413.
Students will work with a local church during the spring or summer semester teaching middle or high school students a 13-week curriculum (Wednesday night or Sunday morning) approved by the church leaders. Students will be evaluated by an approved supervisor (youth minister, preacher, elder, deacon) at the church and an assigned field supervisor from the university. This course is normally offered in the spring and summer semesters.

## 4830 SPECIAL STUDIES IN YOUTH MINISTRY

Content varies. Course may be repeated. (1-3 hours) This course is offered as needed.

## 4900 INDEPENDENT STUDY IN YOUTH MINISTRY

Assigned readings, reports, or projects based on the needs of the individual student. Normally taken only by juniors or seniors with approval of the dean of the college. ( $1-3$ hours) This course is offered as needed

## 4913 INDEPENDENT STUDY IN YOUTH MINISTRY

Assigned readings, reports or projects based on the needs of the individual student. Normally taken only by juniors or seniors with approval of the dean of the college. (1-3 hours) This course is offered as needed.

## CALENDAR

| 2018 FALL SEMESTER |  |
| :--- | :--- |
| August 18 | Saturday |
| August 26 | Sunday |
| September 3 | Monday |
| September 21 | Friday |
| October 9 | Tuesday |
| October 18-19 | Thursday-Friday |
| October 29 | Monday |
| October 30-31 | Tuesday \& Wednesday |
| November 1-2 | Thursday \& Friday |
| November 2-3 | Friday-Saturday |
| November 5-6 | Monday \& Tuesday |
| November 7-8 | Wednesday \& Thursday |
| November 12 | Monday |
| November 16 21-23 | Friday |
| November 21-2 | Wednesday-Friday |
| December $9-13$ | Sunday-Thursday |
| December 14 | Friday |
| December 15 | Saturday |
| December 18 | Tuesday |

2019 SPRING SEMESTER

| January 5 | Saturday |
| :--- | :--- |
| January 6 | Sunday |
| January 14 | Tuesday |
| January 21 | Monday |
| February 1 | Friday |
| February 19 | Tuesday |
| March 1 | Friday |
| March 1-2 | Friday-Saturday |
| March 17-22 | Sunday-Friday |
| April 1 | Monday |
| April 2-3 | Tuesday \& Wednesday |
| April 4-5 | Thursday \& Friday |
| April 5 | Friday |
| April 8-9 | Monday \& Tuesday |
| April 10-11 | Wednesday \& Thursday |
| April 15 | Monday |
| April 15 | Monday |
| April 21-25 | Sunday-Thursday |
| April 26 | Friday |
| April 27 | Saturday |
| April 30 | Tuesday |

## 2019 SUMMER SEMESTER

| April 30 | Tuesday |
| :--- | :--- |
| August 15 | Thursday |
| August 16 | Friday |
| August 20 | Tuesday |

Residence halls open at 8:00 AM
Classes begin for the fall semester
Last day to add classes and for new enrollment
Last day to drop a class without a "W" on the transcript
Six weeks progress reports due at noon
Fall Break
Sr graduating in the next semester pre-enrollment, myOC
Senior pre-enrollment, myOC
Junior pre-enrollment, myOC
Homecoming Weekend
Sophomore pre-enrollment, myOC
Freshman pre-enrollment, myOC
Transfer and New to OC pre-enrollment
Last day to drop a class with a "W" on the transcript or withdraw
Thanksgiving holiday, no classes, offices closed
Final Exam Week
Commencement
Residence halls close at 10:00 AM
Grades due at noon for fall semester

Residence hall open at 8:00 AM
Classes begin for spring semester
Last day to add classes and for new enrollment
Martin Luther King Holiday, no classes, offices closed
Last day to drop a class without a "W" on the transcript
Six weeks progress reports due by noon
Spring Visit
Spring Sing
Spring Break
Senior graduating in the next semester pre-enrollment, myOC
Senior pre-enrollment, myOC
Junior pre-enrollment, myOC
Last day to drop a class with a "W" on the transcript or withdraw
Sophomore pre-enrollment, myOC
Freshman pre-enrollment, myOC
New transfer and concurrent student pre enrollment
New incoming freshman pre-enrollment at 3:00 PM
Final Exam Week
Commencement
Residence halls close at 10:00 AM
Grades due at noon for spring semester

Classes begin
Classes end
Commencement
Grades due at noon for summer semester

