

2009-2011 CATALOG

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**JOHN BROWN UNIVERSITY**

Published by John Brown University  
Siloam Springs, Arkansas  
Spring 2009

*This catalog contains policies and guidelines for the purpose of  
aiding students in planning their educational curriculum  
and is not to be considered a contractual agreement.  
Program requirements, course content, and other regulations  
are subject to change at the discretion of the controlling entities  
within the university.*

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For information concerning the Graduate and Professional Studies Programs, please refer to the 2009-2011 Graduate and Professional Studies Catalog.

# UNIVERSITY CALENDAR

## Traditional Undergraduate Studies

### FALL 2009

W 8/19 — F 8/21 . . . . . International Student Orientation . . . . . W 8/18 — F 8/20  
 F 8/21 . . . . . New Student Move-In . . . . . F 8/20  
 Sa 8/22 — T 8/25 . . . . . New Student Orientation . . . . . Sa 8/21 — T 8/24  
 Sa 8/22 . . . . . New Student Registration . . . . . Sa 8/21  
 W 8/26 . . . . . Classes Begin . . . . . W 8/25  
 M 9/7 . . . . . Labor Day Holiday . . . . . M 9/6  
 W 9/9 . . . . . Last Day for New Enrollments . . . . . W 9/8  
 W 9/9 . . . . . Last Day to Add a Course . . . . . W 9/8  
 M 10/16 . . . . . Midsemester Grades Due . . . . . F 10/15  
 M 10/19 — T 10/20 . . . . . Fall Break . . . . . M 10/18 — T 10/19  
 F 10/23 . . . . . Last Day to Drop a Course . . . . . F 10/22  
 M 11/2 — M 11/16 . . . . . Registration for Spring Term . . . . . M 11/1 — M 11/15  
 W 11/25 — F 11/27 . . . . . Thanksgiving Holidays . . . . . W 11/24 — F 11/26  
 M 12/14 — R 12/17 . . . . . Examination Week . . . . . M 12/13 — R 12/16  
 Sa 12/19 . . . . . Commencement Exercises . . . . . Sa 12/18

### FALL 2010

### SPRING 2010

M 1/11 . . . . . New Student Move-In . . . . . M 1/10  
 M 1/11 — T 1/12 . . . . . New Student Orientation . . . . . M 1/10 — T 1/11  
 M 1/11 . . . . . New Student Registration . . . . . M 1/10  
 W 1/13 . . . . . Classes Begin . . . . . W 1/12  
 W 1/27 . . . . . Last Day for New Enrollments . . . . . W 1/26  
 W 1/27 . . . . . Last Day to Add a Course . . . . . W 1/26  
 M 3/5 . . . . . Midsemester Grades Due . . . . . F 3/4  
 F 3/12 . . . . . Last Day to Drop a Course . . . . . F 3/11  
 M 3/22 — F 3/26 . . . . . Spring Break . . . . . M 3/21 — F 3/25  
 M 3/29 — M 4/12 . . . . . Registration for Fall Term . . . . . M 3/28 — M 4/11  
 F 4/2 . . . . . Good Friday Holiday . . . . . F 4/22  
 M 4/19 — F 4/30 . . . . . Registration for Summer Term . . . . . M 4/18 — F 4/29  
 M 5/3 — R 5/6 . . . . . Examination Week . . . . . M 5/2 — R 5/5  
 Sa 5/8 . . . . . Commencement Exercises . . . . . Sa 5/7

### SPRING 2011

### SUMMER 2010

M 5/10 . . . . . Classes Begin . . . . . M 5/9  
 W 5/12 . . . . . Last Day to Add a Course . . . . . W 5/11  
 F 5/21 . . . . . Last Day to Drop a Course . . . . . F 5/20  
 F 6/4 . . . . . End of Term . . . . . F 6/3

### SUMMER 2011



# UNIVERSITY PROFILE

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## The Mission of the University

The faculty and board of trustees have accepted the following statement as being an accurate expression of the university basic mission:

John Brown University provides Christ-centered education that prepares people to honor God and serve others by developing their intellectual, spiritual, and professional lives.

## Statement of Faith

The doctrinal position of the institution is contained in the following Articles of Faith which have been adopted by the National Association of Christian Schools:

1. We believe the Bible to be the inspired, the only infallible, authoritative word of God.
2. We believe that there is one God, eternally existent in three persons: Father, Son, and Holy Spirit.
3. We believe in the deity of our Lord Jesus Christ, in His virgin birth, in His sinless life, in His miracles, in His vicarious and atoning death through His shed blood, in His bodily resurrection, in His ascension to the right hand of the Father, and in His personal return in power and glory.
4. We believe that for the salvation of lost and sinful man regeneration by the Holy Spirit is absolutely essential.
5. We believe in the resurrection of both the saved and the lost: they that are saved unto the resurrection of life and they that are lost unto the resurrection of damnation.
6. We believe in the spiritual unity of believers in our Lord Jesus Christ.
7. We believe in the present ministry of the Holy Spirit by whose indwelling the Christian is enabled to live a godly life.

## **Educational Philosophy**

**T**he faculty has expressed its purpose as sending forth graduates

### **Whose lives reflect the love of Christ**

Through reverence toward God.  
Through consecration to Christ and His Church.  
Through knowledge of the Bible and appreciation of its principles.  
Through participation in Christian activities with talents, means, and time.  
Through tolerance, humility, and helpfulness to others.

### **Who possess intellectual integrity and an enthusiasm for continuing self-development**

Through use of mental processes which lead to intelligent decisions.  
Through familiarization with sources of information.  
Through utilization of knowledge.  
Through mastery of means of communication of ideas.

### **Who are able to function effectively in a multicultural world**

Through a heightened awareness of diverse cultural contexts and values.  
Through development of skills and attitudes necessary to interact, work, and minister with people of other cultures.  
Through understanding the inclusiveness of God's Kingdom and the equality of all people before God.  
Through formation of a Christian perspective of the world.

### **Who are eager and able to perform a share of the world's work**

Through their willing response to God's unique plan.  
Through working in chosen vocations with skill, efficiency, and dedication.  
Through a cooperative and understanding attitude toward fellow workers.

### **Who make worthy contributions to their communities**

Through active cooperation with other people toward general community improvement.  
Through promoting wholesome entertainment, adequate educational programs, and other phases of community welfare.  
Through exercising their political privileges in the spirit of Christ.  
Through practicing the high ideals of love and justice toward all people.

## History

John Brown University's rich history began with an enthusiastic author, educator, radio broadcaster, and evangelist, John E. Brown, who recognized the need for an academic institution that would prepare young people to serve Christ. In 1919, with a goal of educating the "Head, Heart, and Hand," John Brown laid the foundation for the institution that would later be called John Brown University. The vision of JBU has been carried through its ninety year history by the leadership of the founder, his son, John Brown Jr., his grandson, John Brown III, and Presidents George Ford, Lee Balzer, and now Charles Pollard.

## Head

The university offers an education based on a liberal arts Core Curriculum and 46 undergraduate majors. Also available at JBU are academic opportunities for professionals and graduates. The JBU Advance Program was established in 1993 to meet the needs of working adults and allows them to complete their undergraduate degree. The Graduate Studies Program, established in 1995, offers master's degrees in School Counseling, Community Counseling, Marriage and Family Therapy, Business Administration, Leadership and Ethics, and Ministry.

## Heart

Since its founding, JBU has sought to nourish the spiritual life of its students. Professors and students work together to integrate a Christian worldview with their understanding and practice of academic disciplines. Professors and staff also make themselves available to guide and mentor students in the faith.

Within the JBU community, there are a variety of opportunities for students to deepen and live out their faith. Chapel services are held three times a week and feature dynamic worship and gifted guest speakers. A wide variety of ministry opportunities are offered to students through the Office of Christian Formation.

## Hand

Students also gain valuable professional and personal life-skills that equip them to serve in business, education, industry, ministry, the arts, and a variety of other fields. Students and graduates are encouraged to integrate faith in the workplace and in every area of their lives.

While the scope of JBU's mission has grown over the last 90 years, the central direction of that mission has remained the same: "Christ Over All."

## Location

John Brown University is located in Siloam Springs, in the economically vigorous region of Northwest Arkansas. Several city parks, as well as nearby attractions such as Beaver Lake and Devil's Den State Park, provide ample opportunity for outdoor recreation. Urban activities are easily available as well. Fayetteville and Bentonville, Arkansas, only 30 miles away, and Tulsa, Oklahoma, 80 miles away, offer shopping, dining, and a variety of cultural events.

## Accreditation

John Brown University is accredited by The Higher Learning Commission of The North Central Association (NCA) of Colleges and Schools, <http://ncahigherlearningcommission.org>, phone (800)621-7440, and is approved by the Arkansas State Department of Education and accredited by the National Council for the Accreditation of Teacher Education (NCATE), <http://ncate.org>, phone (202)466-7496, for the preparation of teachers. The Bachelor of Science in Engineering program, including electrical/computer or mechanical concentration, is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410)347-7700, <http://www.abet.org>. John Brown University's Construction Management degree is accredited by the American Council for Construction Education (ACCE), <http://www.acce-hq.org>, phone (210)495-6161. All bachelor's and master's degree programs of the Division of Business are accredited by the International Assembly for Collegiate Business Education (IACBE), <http://www.iacbe.org>, phone (913)631-3009. The United States Department of Justice has approved John Brown University for the education of foreign students.

## Council for Christian Colleges & Universities

John Brown University is a charter member of the Council for Christian Colleges & Universities (CCCU), a resource- and information-sharing association of 111 Christ-centered colleges and universities of the liberal arts and sciences. Member schools, which must be accredited four-year institutions, are committed to maintaining the highest academic standards within an environment which fosters moral and spiritual development in individuals and communities. Incorporated in 1982, the CCCU includes schools representing more than 30 denominations and offers numerous interchange programs in academics and assessment. Headquarters are at 329 Eighth Street NE, Washington, DC 20002, phone (202)546-8913, fax (202)546-8713.

## Academic Year

John Brown University's school year comprises two semesters, with the fall term completed before the December holiday break. Each semester consists of 73 days of instruction followed by a four-day examination period. Commencement exercises follow each semester, scheduled on the Saturday after final examination week.

In addition to the fall and spring semesters, John Brown University offers traditional undergraduate courses in a four-week term starting on the Monday following spring commencement. Most offerings meet requirements in the university Core Curriculum.

## The Student Body

The student body of nearly 1300 in John Brown University's traditional programs represents more than 40 states and more than 50 nations. Approximately 10-15% of the students have primary citizenship in countries other than the United States. This international group includes many members of families involved in Christian missionary work. Most of the students identify themselves as church members; the largest numbers belong to evangelical congregations.

Approximately 500 additional students participate in JBU's Advance Program (Professional Studies Program) for degree completion for adult learners.

Graduate Studies programs in Counseling, Leadership and Ethics, Business Administration, and Ministry include more than 300 enrollees.

## The Soderquist Center for Leadership and Ethics

The Soderquist Center for Leadership and Ethics (SCLE) is a not-for-profit organization founded in 1998 in affiliation with John Brown University's Division of Business and Graduate Business Studies. Located in Siloam Springs, Arkansas, the Center serves as a global resource for equipping people in the corporate, non-profit, and academic world with the transforming power of ethical leadership. The Center is named for Don Soderquist, Executive in Residence and former COO and Senior Vice-Chairman of Wal-Mart Stores, Inc.

The Center's energies are focused on equipping through customizable training programs. Customers include companies and corporations, not-for-profit organizations, and emerging leaders in graduate and undergraduate programs. The Center engages leaders through programs such as the Ethical Leadership Summit for senior executives, the Milestone Program for middle managers, and team building programs on our adventure learning courses.

The Center offers Soderquist Fellowships to top applicants of John Brown University's Master of Business Administration and Master of Science in Leadership and Ethics programs. While working 35 hours per week at the Center, Soderquist Fellows receive full tuition and an hourly stipend for a two-year experience, completing graduate degrees, contributing to the Center's mission, and working alongside veteran business leaders. For more information, visit [www.soderquist.org](http://www.soderquist.org).

## **The Center for Relationship Enrichment**

### **CRE Vision Statement**

The Center for Relationship Enrichment (CRE) exists to encourage and enrich relationships through the transforming power of biblically-based principles.

### **CRE Mission Statement**

The Center for Relationship Enrichment equips people for healthy relationships through biblically-based consulting, education, enrichment, resources, research, and assessment.

### **Primary Goals:**

1. Provide informational and training events designed to instill Christ-centered principles of healthy relationships, with an emphasis on marriage relationships, in the JBU community and at a local, regional, national, and international level.
2. Consult with Christian colleges and universities to assess existing relationship curricula/ministries/programs, help develop new courses/programs, and equip leaders to facilitate the implementation of those programs including the design, development, and delivery of a weekend relationship enrichment program for university students who are seriously dating, engaged, or married.
3. Consult with churches to assess existing marriage curricula/ministries/programs, help develop new courses/programs, and equip leaders to facilitate the implementation of those programs to help them increase their effectiveness in serving marriages and families.
4. Develop relationship-related assessments for colleges, universities, and churches to help them assess the degree to which what they are doing is making a measurable difference in the emotional, relational, and spiritual lives of those they serve.
5. Develop a comprehensive program for Northwest Arkansas to provide pre-marital education, marriage enrichment, and leadership training in

ways that will impact churches, community agencies, and corporations with the goal of impacting the marriages of this community. This will also be designed to serve as a model for other communities.

## Resources for Learning

### John Brown University Library

The two-story John Brown University library—also known as the Arutunoff Learning Resource Center—is the central location for resources supporting the research needs of the JBU community. The library is an important part of the academic program at JBU and functions as a partner in the teaching/learning process. The main collection consists of over 120,000 items, including books, e-books, microforms, sound recordings, DVD and video recordings, curriculum media, computer software, and archival materials. In addition, the library subscribes to more than 6,000 periodical titles that appear in online, paper, microform, or CD-ROM formats. The library also subscribes to 60 electronic databases (full-text periodicals, online reference resources, indexes, and abstracts). The professional library staff provides research and reference services to both individuals and groups, and efficient interlibrary loan services to the JBU community. The library facility includes study rooms, meeting rooms, a group research lab, and a computer lab for student use.

In addition to resources in the main library, a number of materials are housed in four library branches. The Music Library, on the lower level of the Cathedral, contains music sound recordings, scores, and appropriate listening equipment. The Career Development Center Library, on the first floor of the Walker Student Center, houses materials related to vocational counseling and graduate school opportunities. The Construction Management Library, in the Engineering Building, houses books and periodicals related to that discipline. The Soderquist Center for Leadership and Ethics Library is located in the Soderquist Business Center and contains materials relevant to business and ethics.

The gateway to the JBU library is its web site, [www.jbu.edu/library](http://www.jbu.edu/library), where information about all library collections and services may be obtained. The library web site features an online catalog that can be accessed from any computer with an Internet connection. Students can connect to electronic databases through the campus network and via remote access. Reference questions and interlibrary loan requests can be made using online forms found at the web site, instant messaging, or via e-mail at [library@jbu.edu](mailto:library@jbu.edu).

The JBU library belongs to several networks and consortia. To provide efficient interlibrary loan services, the library is a member of the Online Computer Library Center (OCLC), which gives our users borrowing privileges to over 110 million items held in over 12,000 member libraries



worldwide. The library belongs to ARKLink (a consortium of 47 academic libraries in Arkansas) and AMIGOS (a regional resource-sharing network). The library is a charter member of the Christian Librarian Association Network.

Special collections in the JBU library include the published materials of the school's founder, John E. Brown, Sr., materials of radio evangelist J. Vernon McGee, the Romig juvenile literature collection, and the Gary and Carrie Oliver Marriage and Family Resource Room. In addition, the JBU archives houses an extensive collection of artifacts related to the history of the university.

## **Computing Resources**

John Brown University has many technology resources available for students. All campus buildings and remote sites are interconnected with a network and Internet infrastructure that allows for authorized access from classrooms, laboratories, offices, residence halls, and remote locations. Wireless networking also extends accessibility in most residential and study areas across the university.

There are general classroom laboratories equipped with computers and instructional technology for hands-on instruction, and these are available for general computer use when class is not in session. Additionally, the Walker Student Center and the library have general purpose computer labs dedicated for student use and are available days and evenings throughout the week. Draft printing is available in the labs free of charge and black and white and color laser printing is available for a small fee.

There is a Media Lab located in the Learning Resource Center for special printing and other media service needs. Digital cameras, projectors, and other audio/visual technology may be checked out for academic projects. Supplies for lettering, posters, banners, and other needs are available for sale. Large format color printing is also available for a fee.

Each residence hall provides access to a 24-hour computer lab for student use. Additionally there are other specialized computer labs housed in specific academic departments. These include Chemistry, Construction Management, Engineering, Music, Physics, Visual Arts, and Writing Center.

Students who bring their own computer to campus may connect it to the campus network using their provided network account. Once connected, students may access the Internet, e-mail, class-related resources, references, and other university services.

More complete and current information about technology services at John Brown University may be found through the World Wide Web via the EagleNET home page at <http://eagle.jbu.edu>.



## Office of Academic Assistance

Students may contact the Director of Student Support Services for assistance in further developing their academic skills. This includes such areas as study skills, note-taking skills, time management, test-taking skills, and other skills that help students succeed academically. Computer programs that help improve reading, writing, and math are available at minimal cost. Study skill videos are available. The class-tutoring program is funded by and coordinated through this office. The director will help a student engage an individual tutor, but payment is the responsibility of the student.

The Office of Academic Assistance administers the CLEP and MAT, and proctors tests for correspondence courses. For general information, fees, or to schedule an appointment, call Stephen Sbanotto at (479)238-8772.

## Student Support Services

Student Support Services (SSS) is a Federal grant-funded TRIO program designed to promote retention and graduation for traditional undergraduate students through intensive academic support. Students who have disabilities, who are first-generation college students, or who meet federal income guidelines are qualified for participation in SSS. Services include instruction in a variety of study skills, group and individual tutoring, academic counseling, cultural events, academic workshops, and referrals to other campus services. Scholarship funds are also available to qualified students. In order to qualify for a scholarship, a student must be an active participant in SSS, have less than 60 credit hours accumulated at the end of fall semester of the year applying, be Pell Grant-eligible, and meet program-set GPA requirements.

## Services for Students with Disabilities

It is the goal of John Brown University that all enrolled students be given equal opportunity to succeed in their quest for a higher education that is based upon our "Christ Over All" philosophy and that integrates the educational principles of "Head, Heart, and Hand." In accordance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, John Brown University is committed to providing reasonable accommodations to students who are disabled. There is a Director of Student Support Services on staff who works with students and instructors to arrange appropriate assistance in learning and physical access. Students having documented disabilities are encouraged to contact the director at (479)238-8770 or 524-7471, e-mail JWright@jbu.edu, or to stop by the Office of Disability Services located in the Learning Resource Center, Room 147.

## Resources for Service

At the heart of JBU's commitment to servanthood are the many opportunities offered on campus for student participation. Among the most notable are the Student Government Association (SGA) and CAUSE Student Ministries. Those involved in SGA serve as the student voice to the faculty and administration. In addition, they are the initiators and planners of a large number of all-campus activities through the Student Activities Committee (SAC). The purpose of CAUSE is to mobilize JBU students for service and ministry on campus, in the community, and around the world. The CAUSE staff motivates, trains, and supports students as they learn to apply their knowledge and skills to outreach opportunities.

A student also may choose to serve in a residence hall as a Resident Assistant or as a representative to their Residence Hall Association. Other students serve as Career Development Assistants, helping peers investigate occupational choices in the Career Development Center.

## Resources for Lifestyle

After students receive valuable academic training and are given opportunities for servanthood, next comes the goal of developing them into stewards as they seek to develop meaningful lifestyles for themselves. These lifestyles include not only career choices, but also choices regarding the development of healthy bodies through physical exercise and proper diet. The Walton Lifetime Health Complex (WLHC) offers students the most modern of health and fitness facilities for a complete daily work out. Swimming, jogging, racquetball, weights, aerobics, and team sports are just a few of the activities available in the WLHC to help reduce health risks and improve one's quality of living.

## Student Development Services

Growth and development in college involves much more than successfully clearing all the academic hurdles. College is where many of life's great memories are made and significant personal development happens.

The "Community Covenant" serves as catalyst for rapid growth in many areas of life: spiritual, emotional, relational, and physical development. During the college experience, decisions are made which in large part establish the career and service opportunities for a lifetime. There are people and resources at John Brown University that can be of real help at this crucial time.

## **Office of Christian Formation**

The Office of Christian Formation (OCF) exists to lead the JBU community to become more like Christ through discipleship, corporate worship, and outreach. Within OCF are three primary divisions related to JBU students: Chapel, Student Ministries, and Graduate Christian Fellowship. Please see our web page for a more complete description of these ministries and other opportunities at [www.jbu.edu/life/christform/](http://www.jbu.edu/life/christform/).

## **Residence Life Office**

Headed by the Dean of Students/Director of Residence Life, the Residence Life Office is responsible for all concerns related to student housing on campus-room assignments, resident assistant selection and training, residence hall improvements, and residence hall educational and social programming. Each hall is staffed by a resident director who works to maintain a safe and healthy environment for all resident students.

## **Activities Office**

Headed by the Coordinator of Student Activities and Orientation, the Activities Office assists in the coordination of weekly campus activities and maintains a master calendar of events. This office works with all of the clubs and organizations on campus for club approval and funding. The staff of this office is also responsible for new student orientation programs.

## **Student Counseling Center**

The college experience often entails challenges in a student's personal as well as academic development. Developing meaningful relationships, responding to changes in one's family, assuming greater responsibility for one's choices, managing stress, anxiety and depression are just a few of the challenges facing students. The professional staff in the Student Counseling Center is available to facilitate students' development. Individual and group therapy is provided free of charge. Counseling sessions are confidential and appointments are scheduled with discretion and respect for students.

## **Career Development Center**

The staff at the Career Development Center (CDC) is concerned with providing a comprehensive career development program for the students of John Brown University.

Students have the opportunity to develop self-understanding through the resources available at the CDC. Students may participate in individual counseling, personality inventories, and computer-aided guidance programs. The varied resources in the CDC library can be helpful to students in any

stage of career planning by helping them understand personal strengths, make wise decisions about majors, and begin to explore career alternatives.

The center will serve as a link between college and the world of work through providing regular workshops on job search skills and strategies. The annual Career Fair brings employers and graduate school representatives to campus to increase awareness and provide information related to future career and graduate education. The CDC also provides information about graduate schools, graduate entrance test materials, job vacancy notices, occupational profiles and descriptions, and potential employers.

## Health Services

At the Health Services Office located in the Walker Student Center, a registered nurse is available weekdays for screening acute illnesses and injuries, as well as offering advice for everyday health problems. The nurse works closely with area doctors whose offices are within walking distance of campus.

Equipment such as crutches, heating pads, and humidifiers can be checked out for short term use. Health education and wellness materials/videos are available for personal use or class preparation. Allergy injections can be arranged with written orders from the allergist.

In order to offer complete care, it is important that the Health Services office have on file all student medical records pertaining to pre-existing conditions such as diabetes, epilepsy, and malaria. Also, regular updates of family telephone numbers on the JBU web site ensure immediate communication in case of emergency.

Arkansas law regarding Act 141 of 1987 requires documentation of two doses of Measles/Mumps/Rubella vaccination for ALL students. This includes full and part time; residential or commuter; auditors and concurrent high school students; graduate students and undergrads. This is a new standard effective fall 2009.

To receive an application for any exemption, contact the Arkansas Department of Health at (501)661-2169. You can receive the MMR vaccine on campus for no charge.

Arkansas Law regarding Act 96 of 1913 requires all incoming students who were born or have lived for longer than six months in countries where Tuberculosis is endemic to show documentation of a TB skin test ADMINISTERED in the U.S. within six months of classes beginning. This can be done on campus for \$5.

The JBU Health form located at [www.jbu.edu/admissions/forms/health.asp](http://www.jbu.edu/admissions/forms/health.asp) must be completed and accompanied by legitimate documentation of immunizations. Visit [ww.jbu.edu/campus\\_studev/health](http://www.jbu.edu/campus_studev/health) for more information.

## **International Programs Department**

The International Programs Department (IPD) serves the needs of international students including Walton Scholars, MK's, and third culture students. The office also offers assistance with international student orientation, immigration regulations, and international education opportunities. IPD sponsors social and cultural activities to promote intercultural awareness and understanding among the entire JBU community.

**Mission Statement:** The International Programs Department of John Brown University supports students, faculty, and staff who will benefit from and contribute to the intercultural environment of JBU.

**United States Citizenship and Immigration Services.** IPD assists students, faculty, and staff in obtaining and maintaining the proper immigration status. Workshops are conducted on immigration, employment, and U.S. tax issues.

**Walton International Scholarship Programs.** The Walton International Scholarship Program (WISP) awards 60 annual scholarships to students from Central America and Mexico. IPD attentively seeks to ensure growth and long-term success for its WISP scholars.

**International Education.** IPD administers, in conjunction with the academic division, our Semester in Ireland Studies Program and a variety of JBU international summer studies programs. IPD also links students with international and domestic studies opportunities offered through the Council of Christian Colleges & Universities. Short-term international mission teams are also promoted and supported through the IPD.

The **Friendship Family Program** connects international students with a host family who will help in the adjustment process and contributes to students' success by providing care and support.



# EDUCATIONAL PROGRAMS

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## Academic Divisions

**Biblical Studies:** Departments of Bible, Religion, and Philosophy, Christian Ministry, Family and Human Services, and Intercultural Studies. (Pages 81-94)

**Business:** Departments of Accounting, Business Administration, Economics, International Business, Leadership Studies, Management, Marketing, and Sport Management. (Pages 95-109)

**Communication and Fine Arts:** Departments of Communication, Music, and Visual Arts. (Pages 111-138)

**Education:** Early Childhood Education; Secondary Education Programs in English, Mathematics, and Social Studies; P-12 Program in Music; and TESOL Endorsement. (Pages 139-152)

**Engineering and Construction Management:** Departments of Computer Science, Construction Management, and Engineering. (Pages 153-167)

**Humanities and Social Sciences:** Departments of English, History, Language Studies, Political Science, Psychology, and Social Studies. (Pages 169-184)

**Interdisciplinary Studies:** Departments of Interdisciplinary Studies, Core Curriculum, and Military Science. (Pages 185-189)

**Natural Science:** Departments of Biology, Chemistry, General Science, Kinesiology, Mathematics, Physics, and Renewable Energy. (Pages 191-205)

# Curricula

## Bachelor's Degree Programs

|                                  |                 |          |
|----------------------------------|-----------------|----------|
| Accounting                       | B.S. ....       | 99       |
| Art and Illustration             | B.S. ....       | 133      |
| Biblical and Theological Studies | B.A. ....       | 84       |
| Biochemistry                     | B.S. ....       | 197      |
| Biology                          | B.S. ....       | 194      |
| Broadcasting                     | B.S. ....       | 114      |
| Business Administration          | B.S. ....       | 101      |
| Chemistry                        | B.S. ....       | 196      |
| Child and Family Studies         | B.S. ....       | 86       |
| Communication Studies            | B.A. ....       | 115      |
| Construction Management          | B.S. ....       | 157      |
| Digital Media Arts               | B.S. ....       | 134      |
| Early Childhood Education        | B.S.E.....      | 150      |
| Engineering                      | B.S.Eng. ....   | 162      |
| English                          | B.A. ....       | 172      |
| English Education                | B.S.E.....      | 147      |
| Environmental Science            | B.S. ....       | 198      |
| Exercise Studies                 | B.S. ....       | 200      |
| Family and Human Services        | B.S. ....       | 91       |
| Graphic and Web Design           | B.S. ....       | 136      |
| History                          | B.A. ....       | 174      |
| Intercultural Studies            | B.A. ....       | 93       |
| Interdisciplinary Studies        | B.A., B.S. .... | 187      |
| International Business           | B.A., B.S. .... | 103      |
| Journalism                       | B.S. ....       | 116      |
| Management                       | B.S. ....       | 105      |
| Marketing                        | B.S. ....       | 107      |
| Mathematics                      | B.S. ....       | 202      |
| Mathematics Education            | B.S.E.....      | 148      |
| Music—Applied                    | B.A. ....       | 124      |
| Music—General                    | B.A., B.S.....  | 126, 127 |
| Music Education                  | B.Mus.Ed.....   | 128, 145 |



## EDUCATIONAL PROGRAMS

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| Outdoor Leadership Ministries | B.S. ....  | 87  |
| Photography                   | B.S. ....  | 137 |
| Political Science             | B.A. ....  | 178 |
| Pre-Law                       | .....      | 180 |
| Pre-Medical or Pre-Dental     | .....      | 193 |
| Psychology                    | B.S. ....  | 182 |
| Public Relations              | B.S. ....  | 118 |
| Renewable Energy              | B.S. ....  | 203 |
| Social Studies Education      | B.S.E..... | 149 |
| Spanish                       | B.A. ....  | 176 |
| Sport Management              | B.S. ....  | 108 |
| Sports Medicine               | B.S. ....  | 199 |
| Worship Ministries            | B.S. ....  | 130 |
| Youth and Worship Ministries  | B.S. ....  | 89  |
| Youth Ministries              | B.S. ....  | 88  |

### Associate's Degree Programs

|                              |           |     |
|------------------------------|-----------|-----|
| Construction Management      | A.S. .... | 160 |
| Electromechanical Technology | A.S. .... | 167 |
| General Education            | A.A.....  | 189 |
| Interdisciplinary Studies    | A.A.....  | 187 |
| Journalism                   | A.S. .... | 116 |
| Public Relations             | A.S. .... | 118 |

### Minors

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| Accounting.....                        | 100 |
| Art and Illustration .....             | 134 |
| Biblical and Theological Studies ..... | 84  |
| Biology.....                           | 195 |
| Broadcasting.....                      | 114 |
| Business Administration .....          | 101 |
| Chemistry .....                        | 198 |
| Child and Family Studies .....         | 87  |
| Church Leadership .....                | 85  |
| Communication Studies .....            | 115 |
| Construction Management .....          | 159 |
| Digital Media Arts .....               | 135 |
| Economics .....                        | 102 |

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| Education.....   | 152 |
| English.....   | 173 |
| Family and Human Services .....                              | 92  |
| French .....   | 177 |
| General Science .....  | 199 |
| Graphic and Web Design.....                                  | 137 |
| History.....   | 175 |
| Intercultural Studies .....                                  | 94  |
| International Business.....                                  | 103 |
| International Relations .....                                | 179 |
| Journalism .....   | 117 |
| Kinesiology.....   | 201 |
| Leadership Studies .....                                     | 104 |
| Linguistics .....  | 178 |
| Management .....   | 106 |
| Marketing.....   | 107 |
| Mathematics.....   | 202 |
| Military Science.....  | 189 |
| Music.....   | 131 |
| New Testament Greek .....                                    | 85  |
| Outdoor Leadership Ministries .....                          | 88  |
| Performance Studies .....                                    | 117 |
| Photography.....   | 138 |
| Physics .....  | 203 |
| Political Science.....                                       | 180 |
| Pre-Law .....  | 179 |
| Professional Accounting Development.....                     | 100 |
| Psychology .....   | 183 |
| Public Relations .....                                       | 119 |
| Religion and Philosophy .....                                | 85  |
| Renewable Energy.....  | 205 |
| Social Studies .....   | 184 |
| Spanish .....  | 177 |
| Sport Management.....  | 109 |
| Teaching English to Speakers of Other Languages (TESOL)..... | 173 |
| Worship Ministries .....                                     | 132 |
| Youth Ministries .....                                       | 88  |

## University Honors Scholars Program

**Mission Statement.** The mission of the John Brown University Honors Scholars Program is to attract and retain academically advanced students, to stimulate and challenge those students as Christian scholars and effective members of God's Kingdom, and to enrich the academic environment of the broader university community.

**Description of the Program.** The Honors Scholars Program consists of enriched Core Curriculum courses developed especially for gifted and highly motivated students. Emphasizing the use of primary texts, instructors challenge students through individual research, critical reflection, incisive discussion, interactive projects, and professional presentations.

Honors Scholars enter the program at the lower division, which requires a minimum of twelve hours of freshman/sophomore level honors courses. Students wishing to continue in the program must seek admission to the upper division, where nine hours of upper-division honors courses are to be completed. Eligibility for consideration to advance to the upper division is contingent upon prior completion of at least nine lower-division honors hours, three additional hours in progress, and an overall GPA of 3.5. The qualifying student then provides to the Honors Committee a formal written statement of intention to continue. Only after approval to move to the upper division may the scholar begin work on the nine-hour upper-division component. Successful completion of the entire program is acknowledged at an Honors Convocation and by the presentation of a special Honors degree diploma at graduation. Students choose to graduate at one of two levels: Presidential Honors (complete 21 honors hours along with an Honors Capstone Project) or University Honors (complete 21 honors hours). All courses are designated "Honors" on the transcript.

However, the Honors Scholars Program is much more than honors sections of Core Curriculum courses. It is a community of students and faculty working toward enhancing the quality of scholarship on the campus as a whole. The courses are based on national research indicating that students learn more when the abstract learning process is integrated with experiential learning. Most honors courses are integrative and experiential, making use of field trips, guest speakers, and multi-media experiences.

Honors Scholars are strongly encouraged to model Christian principles and good stewardship of their academic gifts through serving in leadership positions on campus and participating in service activities both on and off campus. The Student Honors Organization promotes scholarly presentations and service by the student body as a whole and serves as a peer support group for honors students. Honors Scholars often participate in regional, national, and international honors conferences, workshops, and semesters abroad. The Honors Center, available to Honors Scholars and Alpha Chi

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National Honors Society (Alpha Chi) members, provides an attractive location for studying, cooking, watching television, and tutoring. Several classes meet in the center.

**Eligibility.** High school seniors are selected each spring from a large and very well-qualified pool of applicants. Transfer students and currently-enrolled JBU students who have enough courses remaining to be taken for the Honors degree may also apply.

Eligibility for admission is based on ACT/SAT scores and a separate application. Inquiries concerning the program should be addressed to Dr. Brad Gambill, Director of the Honors Scholars Program, Box 3074, John Brown University, Siloam Springs, AR 72761 or e-mail [bgambill@jbu.edu](mailto:bgambill@jbu.edu).

**Courses.** The following list indicates the courses currently available to Honors Scholars, the Core Curriculum courses for which they may substitute, and the semesters they are offered. The program is subject to periodic review and change by the Honors Committee in order to keep the program relevant, innovative, and challenging.

### Honors Courses in Relation to the Core Curriculum

*Students who are not admitted to the Honors Scholars Program are not allowed to enroll in honors courses.*

| <u>Number</u> | <u>Honors Course</u>                        | <u>Core Counterpart</u> | <u>Term Offered</u> |
|---------------|---|-------------------------|---------------------|
| COR 1091H     | Honors: Orientation to HSP                  |                         | Fall                |
| EGL 1083H     | <sup>1</sup> Honors: English I              | EGL 1013                | Fall                |
| EGL 1093H     | Honors: English II                          | EGL 1023                | Spring              |
| BBL 1083H     | Honors: Old Testament Survey                | BBL 1013                | Fall                |
| BBL 1093H     | Honors: New Testament Survey                | BBL 1023                | Spring              |
| BIO 1093H     | Honors: Biological Science                  | BIO 1003                | Spring              |
| HST 1083H     | Honors: Western Civilization I              | HST 1013                | Fall                |
| HST 1093H     | Honors: Western Civilization II             | HST 1023                | Spring              |
| PSY 1093H     | Honors: Introductory Psychology             | Social Science          | Fall                |
| ECN 2093H     | Honors: Basic Economics                     | Social Science          | Spring, odd         |
| POL 2193H     | Honors: American Government                 | POL 2113                | Spring, even        |
| COR 2591H     | <sup>2</sup> Honors: Colloquium             |                         | Upon Request        |
| BBL 3083H     | <sup>6</sup> Honors: Integrated Theology I  | BBL 3003                | Fall, odd           |
| BBL 4083H     | <sup>6</sup> Honors: Integrated Theology II | BBL 4002                | Spring, even        |
| POL 3093H     | Honors: Political Philosophy                | Philosophy              | Spring, even        |

## EDUCATIONAL PROGRAMS

| <u>Number</u> | <u>Honors Course</u>  | <u>Core Counterpart</u> | <u>Term Offered</u> |
|---------------|---|-------------------------|---------------------|
| COR 3093H     | Honors: Integrated Humanities I                               | <sup>3</sup> The Arts   | Fall, even          |
| COR 4093H     | Honors: Integrated Humanities II                              | Philosophy and EGL 4003 | Spring, odd         |
| COR 3111H     | Honors: Introduction to Honors Capstone Project               |                         | Fall                |
| COR 3591H     | <sup>2</sup> Honors: Colloquium                               |                         | Upon Request        |
| COR 3691H     | Honors: Practicum   |                         | Upon Request        |
| ___ 4193H     | <sup>4</sup> Honors Capstone Project in _____                 |                         |                     |
| ___ 4593H     | <sup>5</sup> Honors Tutorial in _____                         |                         |                     |
| ___ 4693H     | Honors Class Contract in _____                                |                         |                     |
| ___ 4793H     | <sup>5</sup> Honors Service Learning in _____                 |                         |                     |
| ___ 4913H     | <sup>5</sup> Honors Co-Teaching: Readings in _____            |                         |                     |
| ___ 4923H     | <sup>5</sup> Honors Co-Teaching: Classroom Practicum in _____ |                         |                     |

<sup>1</sup>If an incoming Honors Scholar wishes to establish credit for English I by CLEP, the exam must be taken before the first day of Honors: English I. Credit for English II is not available via CLEP.

<sup>2</sup>May be repeated for up to three hours of credit.

<sup>3</sup>Integrated Humanities is a six-hour sequence of two interdisciplinary courses which together substitute for three requirements in the Core Curriculum—Masterpieces of Literature, the Arts Group, and the Philosophy Group. If a student completes only one of the semesters, the course will count for one of the three.

<sup>4</sup>Though not required to do so, Honors Scholars are urged to complete an Honors Capstone Project in their major field of study during their junior or senior year. Projects are subject to recommendation by faculty in the appropriate department and approval by the Honors Committee. Guidelines for the Capstone Project may be obtained from the Honors Scholars office. Supervising faculty receive the usual stipend for independent study, paid by the Honors Scholars Program Office.

<sup>5</sup>A student may earn up to six upper-division honors hours by completing two of these non-traditional options. Options 4593H, 4793H, 4913H, and 4923H are treated as independent studies. Students will be charged the normal independent study fee of \$99 per credit hour. Guidelines are available at the Honors Scholars Program Office.

<sup>6</sup>Integrated Religion is a six-hour sequence of two interdisciplinary courses which together substitute for two requirements in the Core Curriculum (Evangelical Theology and Capstone Seminar in Christian Formation). If a student completes only one of the semesters, the course will count for one of the two.

### Off-Campus Study Programs

Students interested in the following programs should inquire at the International Programs Office in the Walker Student Center.

#### JBU Semester in Ireland

John Brown University operates a semester-long program in Belfast, Northern Ireland every fall semester. Students live in Belfast, take 15 hours of core curriculum course work with Irish professors, and

travel throughout Ireland as they connect classroom and experiential learning.

### **German Studies Program**

John Brown University operates a four-week summer program in Germany and Austria whereby students can earn six hours of credit. The program is housed in a 300-year-old building situated along the banks of the Main River in Northern Bavaria. Courses in the German Studies Program combine classroom work with trips to historical and cultural sites such as Salzburg, Munich, Heidelberg, Nuremberg, and the Austrian Alps. Course offerings vary from year to year.

### **Irish Studies Program**

JBU operates a six-week summer program in Ireland whereby students can earn nine hours of credit. The program is directed by a JBU faculty member who also teaches one course. Additional courses are taught by Irish faculty. Ireland itself—the location, the people, and the culture—is the focus of the program. Program facilities are located on the outskirts of Belfast, Northern Ireland, with the curriculum making use of field trips to numerous locations in Ireland. Course offerings (which offer credit from JBU's Core Curriculum) vary from year to year.

### **Affiliated Study Abroad Programs**

The Council for Christian Colleges & Universities, an association of 111 campuses in the U.S. and Canada, offers the following programs to students of its member institutions. The programs offer a unique opportunity for students to make the world their classroom, going beyond the confines of the traditional classroom. For further information, consult the CCCU web site at [www.bestsemester.com](http://www.bestsemester.com).

*Travel Disclaimer: All travel plans are subject to change if the situation for any of the destinations is thought to compromise the students' safety.*

### **American Studies Program**

Founded in 1976, the American Studies Program (ASP) has served hundreds of students from member institutions as a "Washington, D.C. campus." ASP uses Washington as a stimulating educational laboratory where collegians gain hands-on experience with an internship in their chosen field. Internships are tailored to fit the students' talents and aspirations and are available in a wide range of fields. They also explore pressing national and international issues in public policy seminars which are issue oriented and interdisciplinary. The seminars are led by ASP faculty and Washington professionals. ASP bridges classroom and

marketplace, combining biblical reflection, policy analysis, and real-world experience. Students are exposed to on-the-job learning that helps them build for their futures and gain perspective on the calling of God for their lives. They are challenged in a rigorous course of study to discover for themselves the meaning of Christ's lordship in putting their beliefs into practice. The aim of the program is to help council schools prepare their students to live faithfully in contemporary society as followers of Christ. Students earn 16 semester hours of credit.

### **Australia Studies Centre**

The Australia Studies Centre (ASC) immerses students in a dynamic Christian community through which they will come into contact with the cultural diversity of Sydney and the surrounding region. Students will interact with others who share a commitment to personal development through study and fellowship. ASC provides a variety of course offerings including theology, theatre, dance, and ethnomusicology. The courses are taught by some of Australia's leading teachers, musicians, and theologians. Travel opportunities include trips into the Blue Mountains, Jenolan Caves, and Canberra. Students will experience such activities as a bush walk, touring the Australian National Museum, and the Parliament House. At the end of the semester, ASC participants will come away well equipped to undertake ministry opportunities in all walks of life and across cultural boundaries. Students earn 15-18 semester hours of credit.

### **China Studies Program**

The China Studies Program enables students to engage this large and intriguing country from the inside. While living in, and experiencing Chinese civilization firsthand, students participate in seminar courses on the historical, cultural, religious, geographical, and economic realities of this strategic and populous nation. In addition to the study of standard Chinese, students are given opportunities such as assisting Chinese students learning English or working in an orphanage, allowing for one-on-one interaction. The program introduces students to the diversity of China, including Hong Kong, Beijing, Shanghai, Xi'an, and Xiamen. This interdisciplinary, cross-cultural program enables students to deal with this increasingly important part of the world in an informed, Christ-centered way. Students earn 15-17 semester hours of credit.

### **Contemporary Music Center**

The Contemporary Music Center (CMC) provides students the opportunity to live and work in community while seeking to understand how God will have them integrate music, faith, and business. Both interdisciplinary and multi-disciplinary in nature, the CMC offers two tracks: the Artist Track and the Executive Track. The Artist Track is tailored to students



considering careers as vocalists, musicians, songwriters, recording artists, performers, producers, and recording engineers. The Executive Track is designed for business, arts management, marketing, communications, and other majors interested in possible careers as artist managers, agents, record company executives, music publishers, concert promoters, and entertainment industry entrepreneurs. Both Artist and Executive track students receive instruction, experience, and a uniquely Christian perspective on creativity and the marketplace, while working together to create and market a recording of original music. Both tracks include course work, labs, directed study, and a practicum. Students earn 16 semester hours of credit.

### **Latin American Studies Program**

Students of CCCU colleges have the opportunity to live and learn in Latin America through the Latin American Studies Program, based in San Jose, Costa Rica. The program introduces students to a wide range of experiences through the study of the language, literature, culture, politics, history, economics, ecology, and religion of the region. Living with a Costa Rican family, students experience and become a part of the day-to-day lives of typical Latin Americans. Students also take part in a service opportunity and travel for three weeks to nearby Central American nations. Students participate in one of four concentrations: Latin American Studies (offered both fall and spring terms); Advanced Language and Literature (limited to Spanish majors and offered both fall and spring terms); International Business and Management (offered only in fall terms); and Tropical Sciences (offered only in spring terms). Students in all concentrations earn 16 semester credits.

### **Los Angeles Film Studies Center**

The Los Angeles Film Studies Center is designed to train students of council member institutions to serve in various aspects of the film industry with both professional skill and Christian integrity. Students live, learn, and work in the LA area near major studios. The curriculum consists of two required seminars focusing on the role of film in culture and the relationship of faith to work in this very influential industry. In addition, students choose two elective courses from a variety of offerings in film studies. Internships in various segments of the film industry provide students with hands-on experience. The combination of the internship and seminars allow students to explore the film industry within a Christian context and from a liberal arts perspective. Students earn 16-18 semester hours of credit.



## **Middle East Studies Program**

Based in Cairo, Egypt, the Middle East Studies Program (MESP) allows Council students to explore and interact with the complex and strategic world of the modern Middle East. The interdisciplinary seminars give students the opportunity to explore the diverse religious, social, cultural, and political traditions of Middle Eastern people. In addition to seminars, students study the Arabic language and work as volunteers with various organizations in Cairo. Through travel to Israel, Palestine, Jordan, Syria, and Turkey, students are exposed to the diversity and dynamism of the region. MESP encourages and equips students to relate to the Muslim world in an informed, constructive, and Christ-centered manner at a time of tension and change. Students earn 16 semester hours of credit.

## **Oxford Summer Programme**

This program allows students to spend a summer term studying at the Wycliffe Hall in Oxford, England. The program includes multidisciplinary study of the Renaissance and Reformation through examination of philosophy, art, literature, science, music, politics, and religion of early modern Europe in a choice of lectures, seminars, and field trips. Students earn six to nine semester credits, which are administered directly to member institutions.

## **Oxford Honours Programme**

Honors and other highly qualified students have the exciting opportunity to study in England through this interdisciplinary semester in Oxford. The rigorous academic program, aimed at increasing critical thinking skills and scholarship from an integrated Christian perspective, allows participants to choose from a wide variety of tutorial study programs in numerous disciplines, including the arts, religion, history, literature, and philosophy. In addition to two tutorials, students participate in a seminar and an integrative course through which they produce a scholarly project or term paper. Field trips provide opportunities for experiential learning in England's rich historical setting. Students earn 17 semester hours of honors credit.

## **Russian Studies Program**

Students in the Russian Studies Program (RSP) are exposed to the depth and diversity of the culture during a semester spent in Russia's three largest cities: Moscow, St. Petersburg, and Nizhni Novgorod. In addition to three seminar courses entitled History and Sociology of Religion in Russia; Russian Peoples, Cultures and Literature; and Russia in Transition, students receive instruction in the Russian language, choosing either four or

six semester hours of language course work. For those choosing four hours of Russian, a seminar course, International Relations and Business in Russia, is available. RSP strives to give students as wide an experience as possible in this complex nation, beginning with time in Moscow, the heart of both medieval and modern Russia. Students then spend 12 weeks in Nizhni Novgorod, a strategic city on the Volga River. After six weeks of language instruction, students live with a Russian family for the remainder of their stay in this city. Students also participate in a service opportunity in Nizhni Novgorod. The program concludes with time in the complex and intriguing city of St. Petersburg, the Russian “window to the West.” Students earn 16 semester hours of credit.

### **Uganda Studies Program**

The Uganda Studies Program (USP) exposes students to the uniqueness of Ugandan culture. During their stay in Uganda, they will be able to view the beauty of nature, experience Christianity in the Ugandan culture, and learn about Ugandan history. Students participate in service projects which include teaching English, tutoring at an orphanage, constructing housing, and visiting with AIDS patients. Courses of study include African Politics, Conversational Luganda, Contemporary African Literature, and Religions of Africa. Travel throughout Uganda will allow the participants to see parks, historical sites, and population centers. USP equips students with an expanded worldview and an appreciation for diversity. Students earn 16 semester hours of credit.

### **Washington Journalism Center**

Washington Journalism Center (WJC) is an advanced, experiential semester on Capitol Hill that will cultivate professional news skills and encourage students to think through the implications of being a Christian working in the news media in a city that is home to the powerful and the powerless. The center blends classroom experience with hands-on work and provides excellent opportunity to learn through lectures and panels with leading journalists who share a strong Christian commitment. Students also participate in seminars taught by communications professors from council member institutions, take part in field trips, and complete workshop projects for hometown newspapers. The center develops students as Christian journalists exhibiting both professionalism and legal/ethical integrity. Students earn 16 semester hours of credit.

## **Other Off-Campus Programs**

### **Eduventure**

Eduventure is a unique experiential learning program combining education and adventure with hands-on cross-cultural communication and community

development. Eduventure operates programs in Fiji and Mexico. The 18-hour course of study consists of Physical Education, Cross-cultural Communications, Spiritual Formation, Field-Based Anthropology, Community Development, and Applied Missions.

### **Global Stewardship Study Program**

Sponsored by the Christian Environmental Association and endorsed by the CCCU, the Global Stewardship Study Program (GSSP) gives students the opportunity to explore the critical issues of biblical stewardship in a unique living and learning setting in Belize. Students may earn as many as 16 hours of upper-division credit while investigating such diverse topics as the interconnected dimensions of natural ecology, human consumption, population, Christian discipleship, economics, language, and culture. Through the four months of study, discussion, and travel, GSSP participants gain experience for future service in international missions, education, relief and development, and environmental work.

### **Institute for Family Studies**

The Institute for Family Studies, commissioned by Focus on the Family in Colorado Springs, exists to provide a unique Christian educational community that nurtures passionate and persuasive leaders who are committed to Jesus Christ, equipping them to promote healthy families, vibrant churches, and a civil society. Participants can earn either 12 or 15 credit hours, depending on the semester attended. The teaching and research program, tailored to the student's interests and goals, addresses issues such as the indispensability of the two-parent unit, the importance of fatherhood, marital fidelity, parental authority, and faith in God.

### **Living and Learning in Quito**

Living and Learning in Quito, Ecuador, is a 13-week semester study abroad program available to students who desire to continue their college education in an international setting. Living and Learning in Quito functions under the supervision of Youth World International. The program combines classroom learning and practical internships in a unique and challenging cross-cultural setting. Students will be enrolled in a Spanish language institute during their time in Quito. Interested students should contact the International Programs Office.

### **National Collegiate Honors Council Semesters Program**

Membership in the National Collegiate Honors Council (NCHC) entitles JBU Honors Scholars to apply for off-campus semesters which offer 16 hours of honors credit. Consortia agreements with host institutions enable students to receive credit directly from JBU. The semesters combine field

studies, research, internships, seminars, and planned living-learning environments that fully exploit resources of the locale of the study. Settings for NCHC Semesters have included Greece, New York, Washington, D.C., Grand Canyon, Appalachia, Texas-Mexico borderlands, coastal Maine, and the Czech Republic.

### **Semester in Spain (Seville)**

The semester in Seville, Spain, is an exciting way for students to be immersed in Spanish language and culture. All levels of Spanish fluency, from beginning to advanced, will benefit from the time spent with the host family and surrounding Sevillianos. Travel opportunities in Spain include Barcelona, Madrid, Toledo, and Granada. Also within short flight distance are many historical cities in Europe and northern Africa. Students can earn a possible 16 semester hours of credit. This program is required for majors in Spanish.

### **Academic Policies for Off-Campus Programs**

1. For JBU credit to be awarded, the program or experience must be approved in advance by the International Programs Committee.
2. Credit earned in non-JBU led off-campus programs is posted as "CR" on the student's JBU transcript.
3. Students in such programs are designated as enrolled at JBU.

### **Financial Aid Policy for Off-Campus Programs**

This information applies only to aid directly from John Brown University. It does not affect any federal or state aid or loans that a student may have. It also does not apply to the JBU Semester in Ireland Program.

Off-campus study is a valuable part of a student's education. Therefore, JBU allows a certain number of students per year to apply a portion of their institutional financial aid to semester abroad programs. In allocating financial aid funds to semester abroad programs and selecting students to receive such a benefit, the university's policy is driven by two guiding principles:

- > Study abroad programs that immerse students in a foreign culture are some of the most valuable, life-changing educational experiences that a student can have.
- > Cross-cultural study that occurs in a Christian context and is motivated from a Christian worldview is the most meaningful kind of semester abroad experience.

Therefore, John Brown University seeks to give priority in financial aid support and student selection to cross-cultural programs that share its Christian mission and educational perspective.

### **Amount of Study Abroad Financial Aid**

- > Up to 100% of institutional financial aid, depending on available funds: Semester in Spain (Seville) study program and Oxford Honours Programme.
- > Up to 75% of institutional financial aid, depending on available funds: All international CCCU programs and other Christian-based cross-cultural programs approved by the International Programs Committee.
- > Up to 50% of institutional financial aid, depending on available funds: All domestic CCCU programs and IPC-approved domestic programs (such as the Focus on the Family Institute).

### **Procedure for Awarding Study Abroad Financial Aid**

1. By February 1 of the preceding semester, any student planning to apply JBU financial aid to a study abroad program for the fall semester must notify the International Programs Office in writing. The International Programs Committee will allocate up to 75% of available financial aid funds to up to 75% of the student cap for students studying abroad in the fall semester.
2. By October 1 of the fall semester, any student planning to apply JBU financial aid to a study abroad program for the spring semester must notify the International Programs Office in writing. The International Programs Committee will allocate the remaining available financial aid funds to eligible students studying abroad in the spring semester.
3. Award amounts for each individual student will vary based on the overall number of students applying for study abroad, the particular program attended, and the amount of aid that the student is eligible for. In addition, the following factors will affect award amounts: prior participation in semester abroad programs, financial need, year of study at John Brown University, and overall GPA.

### **Other Stipulations**

1. Students receiving scholarships that require on-campus service (such as resident assistants, Student Government Association officers, student publications editors, CAUSE officers, and athletes) may not apply their institutional scholarships to study abroad programs.
2. Students attending JBU under a tuition exchange program from another college cannot carry that exchange to an off-campus program. Students receiving JBU tuition remission may apply up to 75% of their tuition remission to an off-campus program.
3. Students receiving JBU aid while attending off-campus programs must return to JBU for further study, or must graduate from JBU at the

conclusion of the program. If this is not done, the student must repay the amount received from JBU as financial aid for the program.

4. All summer study abroad tuition and fees must be paid in full by May 5, fall trips payment is due August 5, and spring trips payment is due January 5.

## RESERVE OFFICER TRAINING CORPS

The Reserve Officer Training Corps (ROTC) Programs offered through John Brown University provide unique physical and mental challenges for all aspiring leaders. Available through cross-town agreements with the University of Arkansas-Fayetteville, the ROTC programs prepare young men and women for careers as professional military officers. In addition to academic studies, each service requires that all students attend a weekly leadership laboratory (held at the University of Arkansas campus).

The freshman and sophomore courses are electives offered to male and female students who may earn four hours of academic credit in Aerospace Studies or up to six hours in Military Science. Absolutely no military obligation is incurred by non-scholarship students as a result of their enrollment in or completion of any or all of their freshman or sophomore ROTC courses.

## U.S. AIR FORCE ROTC

In addition to the first two years of academic study (see above), John Brown University, in cooperation with the University of Arkansas and the U.S. Air Force, offers two years of advanced instruction in Aerospace Studies. Providing three hours of academic credit per semester for Air Force cadets, the advanced instruction prepares students for the responsibilities and privileges of a commissioned officer.

Air Force ROTC (AFROTC) cadets must attend and successfully complete field training, a step usually accomplished between the sophomore and junior years. AFROTC cadets may volunteer to attend various professional development courses during their "non-field-training" summers.

Each student must successfully complete the summer field training to qualify for the advanced AFROTC program. All veterans who have completed basic training and 180 days of service with any component of the U.S. Armed Forces are exempt from the freshman AFROTC course.

Financial assistance is also available in the form of monthly stipends for cadets officially enrolled in the advanced training program, who have successfully completed summer field training. Additionally, Air Force ROTC offers four-, three-, and two-year scholarships to competitively selected students. Scholarship recipients receive a monthly tax-free allowance ranging from \$300 to \$450, payment of tuition expenses, textbook payment, and payment of certain other fees. Additional information and applications for this assistance may be obtained at <http://www.afrotc.com>.



A student who successfully completes the Advanced Course in Air Force ROTC and receives a degree will be awarded a commission and will serve on active duty in the U.S. Air Force.

All textbooks, instructional material, uniforms, and equipment required for ROTC courses are loaned to the student at no cost. Refer to page 207 for descriptions of U.S. Air Force ROTC (ARO) courses.

### U.S. ARMY ROTC

In addition to the first two years of academic study (see above), John Brown University, in cooperation with the University of Arkansas and the U.S. Army, offers two years of advanced instruction in Military Science. The advanced instruction prepares students for the responsibilities and privileges of a commissioned officer. This advanced instruction offers four hours of academic credit per semester for Army cadets. Additionally, all students enrolled in the final two years of ROTC receive a monthly tax-free allowance ranging from \$350 to \$400.

Army ROTC cadets attend a 33 day Leadership Development and Assessment Course between their junior and senior school year. Cadets may attend professional development training such as airborne, air assault, British Exchange Program, northern warfare, and mountain warfare. During summer field training, cadets receive room and board.

For students having a minimum of two academic years in school remaining (undergraduate, graduate, or a combination of the two), an alternate two-year program is offered. Students entering the two-year ROTC program attend a 28-day Leaders Training Course (LTC) during the summer. Rising juniors, seniors, and graduate students who meet the U.S. Army Cadet Command's Scholar-Athlete-Leader criteria and are unable to attend the LTC may be eligible to participate in an Accelerated Cadet Commissioning Training Program (ACCT) conducted on the University of Arkansas-Fayetteville campus. Students with high school-level military schooling (ROTC, NDCC, or Military Academy) may qualify for the advanced ROTC program without completing the freshman or sophomore courses. All veterans who have completed basic training and 180 days of service with any component of the U.S. Armed Forces can receive full credit for the freshman and sophomore courses and may enter ROTC at the advanced level, once junior academic standing has been achieved.

Financial assistance is also available to qualified students enrolled in ROTC courses. The Army offers 2-, 2.5-, 3-, 3.5-, and 4-year scholarships. Freshman or sophomore students who are not enrolled in Army ROTC may qualify for on-campus 2- or 3-year scholarships. Juniors, seniors, and graduate students who have at least two full years of college remaining may also qualify for on-campus 2- or 3-year scholarships. Scholarships can be used to pay for graduate schooling. Scholarship students receive a monthly

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tax-free allowance ranging from \$250 to \$400, payment of all tuition expenses, textbook payment, and payment of certain other fees. Engineering and nursing students are highly encouraged to apply.

Army ROTC scholarship and advanced course students must agree to successfully complete at least one semester of American Military History prior to commissioning.

A unique financial assistance program is available to all Army ROTC sophomore (MS II), junior (MS III), and senior (MS IV) students through the Simultaneous Membership Program (SMP). This program allows these students to be enrolled in Army ROTC while simultaneously serving with a Reserve or National Guard unit. Financial benefits of this program presently provide approximately \$600 to \$1,100 per month to SMP students. In addition, Army ROTC SMP students will also receive Federal Tuition Assistance (FTA) which will pay 100% of tuition up to \$4,500 per year. Eligible Army National Guard students may also receive additional financial assistance through the Guard Tuition Assistance Program (GTAP).

All students who successfully complete the advanced course in either ROTC program and receive a degree may be accepted for a Regular or Reserve Commission in the United States Air Force or in one of the 16 branches of the Army.

All textbooks, instructional material, and equipment required for ROTC courses are furnished at no cost to the student. Exception: Army ROTC MS III (junior) and MS IV (senior) cadets are required to purchase their textbooks.

Course descriptions begin on page 287 for Military Science Courses (MSC) (Army ROTC).

### **ROTC Contact Information**

John Brown University students interested in ROTC should contact the Academic Affairs Office for details. Additionally, information about the local programs available at the University of Arkansas can be found on the web at [www.uark.edu/armyhog](http://www.uark.edu/armyhog) or [www.afrotc.uark.edu](http://www.afrotc.uark.edu).



# ADMISSION

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## General Procedures

Students wishing to apply for admission should proceed as follows:

1. Register to take the ACT or SAT examination during the junior or senior year of high school and have scores sent to John Brown University.
2. Provide John Brown University with a copy of the official high school transcript. The following high school courses are recommended as college preparation:
  - English—4 units
  - Natural Science—3 units (two of three should be biology, chemistry, or physics)
  - Mathematics—3 units (Algebra I and higher)
  - Social Studies—3 units
  - American History—1 unit
  - Foreign Language—2 units
  - Total Credits—16 units

The following are recommended for admission to programs in science and engineering:

- English—4 units
- Natural Science—3 units
- Mathematics—4 units
- Social Studies—3 units
- Total Credits—14 units

3. Submit all of the following:
  - a. Completed application for admission
  - b. Signed statement on the application form affirming that you have read, understand, and agree to abide by the university's lifestyle expectations (see Student Handbook for details)
  - c. ACT or SAT test scores (applicants 21 years of age or older and international applicants may be admitted without ACT or SAT scores)
  - d. Completed high school transcript or equivalent
  - e. References from individuals who can address your spiritual and academic character
  - f. \$25 (non-refundable) application fee
  - g. Health and immunization records, including date of Measles/Rubella vaccination
4. Official transcripts of any college or post-high school credit, mailed

directly to JBU from the awarding institution(s).

5. Certain departments have additional requirements for official admission:
  - a. Prospective music majors must audition.
  - b. Teacher Education applicants must have an ACT score of 20 or higher (or SAT equivalent).

## **Application Deadline**

The Admissions office reviews applications using a series of deadlines for guaranteed on-campus housing. The number of residence hall spaces available for new students is limited, and JBU admits the number of qualified candidates from the applicant pool for which available spaces exist in the residence halls.

## **Criteria for Admission**

### **First-Time Freshmen**

To be admitted as a first-time freshman, the applicant must present a transcript showing graduation from high school or GED, and the score and percentile achieved on the ACT or SAT. Home educated students will be admitted using the same criteria. However, home educated students seeking Federal Financial Aid will be required to submit an officially recognized high school diploma or equivalent.

To be admitted on regular freshman status, an applicant must have scored at or above 20 on the ACT or 950 on the SAT test and have a high school cumulative grade-point average at or above 2.5 (excluding remedial course work). In addition to the academic criteria outlined above, an applicant must submit two references: one from a high school counselor or teacher, the other from a church leader (pastor, youth pastor, or Sunday school teacher).

The Admissions office is responsible for determining the overall "fit" of an applicant with the university. Academic, social, and spiritual factors are considered. It is helpful for the applicant to provide as much relevant information as possible in determining whether there is a good match between the applicant and the university.

### **Mandatory Placement in English**

Students for whom English is a second language will take the COMPASS/ESL test for placement in the appropriate English class. Students placed in ESL classes will continue in the English track each semester without a break. (English I will immediately follow ESL III, and English II will immediately follow English I.)

## Mandatory Placement in Mathematics

Freshmen who score below 19 on the Math section of ACT (or SAT equivalent) will be placed in MTH 0153 Intermediate Algebra.

## ASPIRE Admission

An applicant who is unable to qualify for admission under regular criteria may be admitted by action of the Admissions Committee. First-time freshmen and transfer students having test scores or GPAs below the required minimums may request consideration by the committee. Such applicants may be asked to write an essay describing their reasons for seeking a Christian college educational experience, their career goals, and their plans for succeeding at John Brown University. If possible, the applicant will be interviewed by an Admissions Counselor. The interview may be conducted in person or by telephone.

Students whom the committee permits to enroll will be required to participate in ASPIRE—the Academic Success Program for Inspiring and Reaching Excellence. ASPIRE supports students academically so that they have opportunity to be successful in their first year at John Brown University. As part of the Head, Heart, and Hand mission of the university, we seek to come alongside these students to offer guidance, encouragement, and accountability.

ASPIRE stipulations include the following:

1. Academic load limited to 13 credit hours for the first semester and 16 credit hours during the second semester.
2. Required enrollment and participation in the How We Learn: Gateway Seminar.
3. Bi-weekly grade checks.
4. Monthly individual meetings with the Director of Student Support Services.
5. Specialized advising and tutoring.

ASPIRE is a fee-based program. Students and their parents or guardians must sign a commitment to participate as part of the admission agreement.

Only a limited number of students are accepted into ASPIRE each year. Once this limit has been reached, candidates are placed on a waiting list.

## Transfer Students

To be admitted as a transfer student, the applicant must have been enrolled in college as a full-time student for at least one semester following high school graduation. Each college must send an official transcript directly to John Brown University. A high school transcript and standardized test scores may also be required. Transcripts for all transfer

students are subject to academic review prior to acceptance. An overall college grade point average of at least 2.5 is required, and a grade of 'C' or better is required in each course received for credit. Any transfer student with less than a 2.5 cumulative GPA, regardless of ACT/SAT score, will be brought to the Admissions Committee for review. Any transfer student with fewer than 24 transferable hours is subject to standard high school admissions requirements (20 ACT or 950 SAT) plus 2.5 high school GPA.

The following students will be brought to the admissions director for internal review and subsequent committee review when deemed necessary: 1) those transferring from a junior or community college with no or a sub-standard ACT/SAT score (minimum 20 ACT or 950 SAT) regardless of GPA or 2) those transferring from a fully-accredited four-year institution with less than a 3.0 cumulative GPA and with no or a sub-standard ACT/SAT score.

Entering students having more than 24 semester hours transfer credit receive scholarship consideration on the basis of college credit.

### **Non-Degree Students**

Students wishing to enroll at the university without pursuing a degree should indicate this on the application form. The application process is streamlined and there is no processing fee, but non-degree students are required to pay for all instruction and other services at the regular rate. Such students may enroll for no more than 11 hours per semester, and credit earned may count toward a degree only after students reapply and are accepted for admission under regular student status. The reapplication process must include all relevant transcripts and applicable test scores.

### **International Admissions Requirements**

John Brown University admits international students who meet the general admission criteria and have demonstrated proficiency in English. Applicants from non-English speaking countries must take the Test of English as a Foreign Language (TOEFL) as administered by the Educational Testing Service at the nearest examination center or the ACT, SAT, A levels or O levels. The minimum TOEFL score for admission is a total of 500 for the written exam, 173 on the computer-based exam, or 64 on the web-based exam. The language proficiency for Walton International Scholarship recipients is evaluated for admissions purposes by an alternative means as determined by the International Programs Office in consultation with the Department of Language Studies. In addition, the COMPASS examination will be given after students arrive on campus to place students in the appropriate level of English instruction.

International students must also provide the following:

1. Completed international application form.
2. A \$100 U.S. non-refundable application fee.
3. Essay, written by the applicant, explaining reasons for wanting to attend JBU.
4. Letter of recommendation from the following:
  - a. Principal (headmaster) of high school or the Dean of Students at a previous university.
  - b. Pastor or church leader.
5. Official transcripts of academic records at secondary school or university.
6. For regular freshman status, an applicant must present an examination report of an internationally recognized, standardized test.
7. Immunization record including dates of two doses of Measles/Mumps/Rubella vaccination.
8. Bank statement or an Affidavit of Support showing ability to pay for one year's fees (<http://www.uscis.gov/files/form/I-134>).

When all admissions requirements have been met and the initial deposit paid, the International Programs office will issue an Immigration Form I-20. This allows the student to apply for the F-1 student visa at an American Embassy.

Mr. William A. Stevenson, III, is the director of the International Programs Department.

## **International Baccalaureate Program**

Credit is awarded for higher level international baccalaureate (IB) courses accompanied by scores of five or above on the respective IB exams. JBU course equivalences and the number of credit hours awarded are determined upon evaluation of the IB work.

## **Notice of Nondiscriminatory Policy**

John Brown University admits persons to its programs and activities without regard to race, color, national or ethnic origin, or gender. The university does not discriminate on the basis of race, color, national or ethnic origin, physical or mental disability, or gender in the administration of education policies, admission policies, scholarship and loan programs, athletics, and other school-sponsored programs.

# FINANCIAL PLANNING

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## COST OF ATTENDANCE

### Application Fee

Applications for admission to the university should be accompanied by a \$25 non-refundable application fee.

### Charges for 2010-2011

| <b>Traditional Undergraduate</b>       | Per Semester | Annual Total |
|--|--------------|--------------|
| Full-time Tuition (12-18 credit hours) | \$ 9,422     | \$18,844     |
| General Fee                            | 443          | 886          |
| Room and Board (Residence Halls)       | <u>3,438</u> | <u>6,876</u> |
| Total                                  | \$13,303     | \$26,606     |

Housing options which include reduced plans (based on seven meals per week) are available on a limited basis, primarily to upper-division students.

|   |          |
|---|----------|
| Part-time Tuition, per credit hour                                  | \$ 628   |
| Part-time General Fee (9-11 credit hours)                           | \$ 212   |
| Tuition per credit hour over 18                                     | \$ 314   |
| Independent Study, per credit hour (in addition to regular tuition) | \$ 105   |
| Summer 2010 Tuition, per credit hour                                | \$ 314   |
| Summer 2010 Room and Board, 4-week term                             | \$ 1,030 |

Professional Studies Tuition See Graduate and Professional Studies Catalog

Graduate Studies Tuition See Graduate and Professional Studies Catalog

### Reduced Tuition

Certain students receive tuition discounts when enrolling for traditional full-semester undergraduate classes, as follows:

Students 55 or over: one-half of regular rate, with no course or cumulative hours restrictions

Students 30 to 54: one-half of regular rate, enrollment in two courses or six credit hours maximum per semester

Concurrent High School Enrollment: Area high school students may enroll for one course per semester at reduced cost. Participation in the program is limited. (See page 53.)

## Tuition Deposit

A tuition deposit of \$200 is required of all new applicants who have tentative or final acceptance status. This deposit is fully refundable before May 1, prior to fall semester enrollment and December 15, prior to spring semester enrollment. For students applying or attaining an accepted admission status after the refund date, the tuition deposit will not be refundable. The tuition deposit is designed to secure the student's enrollment at John Brown University and will be applied as a credit directly to the student's account.

## Off-Campus Housing

Married students, students living with parents, and students living with full-time faculty or staff are permitted to enter as day students. Students who are 22 years of age or older are permitted to live off campus. Students who have lived in JBU housing for at least six semesters are eligible to apply to the Student Development Office for approval to live off campus.

## Room Deposit

Each student who wishes to live in university housing is required to submit \$100 before a room assignment can be made. The fee is fully refundable until May 1 for the fall semester and December 15 for spring semester.

1. This deposit may be submitted after the student receives notification of acceptance to the university. A room assignment is made after the deposit is received.
2. The room deposit will be held in a separate account until the student graduates or no longer resides in university housing.
3. Room damage charges may be assessed as they occur or when the student officially checks out of university housing. Charges are posted in the business office on the student's account to be paid before the beginning of the next semester. The balance of the deposit will be credited to the student's account following the end of the last semester in which the student lives in university housing. If charges exceed the amount of deposit, official transcripts or diploma may be withheld until the account is cleared. Should a student fail to follow the official check-out procedures, the room deposit will be forfeited.

## Meal Plans

All residence hall students are required to participate in the JBU meal plan. They may choose either a 12- 16- or a 21-meal-per-week option. The cost is the same; the difference is that the 12- and 16-meal options give the student a larger spending account in the California Cafe.

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Residents of the Townhouses and single students residing in Broadhurst Village Duplexes are required to participate in a minimum 7-meal plan.

Non-resident students are offered two Commuter Meal Plan options:  
1) \$481 which provides 50 meals in the cafeteria and \$160 in bonus points for use in the California Cafe or 2) \$261 which provides 25 meals in the cafeteria and \$95 for use in the California Cafe.

### Additional Fees

#### **Graduation Fee** **\$35**

Each graduating student is required to pay this fee, without regard to commencement participation. After anticipated graduation has been confirmed by the registrar, the fee will appear on the student's account during the final semester of attendance. In addition, students who participate in commencement will be required to purchase regalia through the bookstore.

#### **Official Transcripts** **\$2**

The first transcript is issued without charge. The fee is charged for all subsequently issued transcripts.

#### **Auto Registration** **\$25**

Any automobile that will be parked on campus must have a JBU parking sticker. This sticker is valid for one academic year, fall semester through summer terms. Motorcycle registration fee is \$15.

#### **Orientation** **U.S. Residents \$100** **Internationals \$200**

All incoming full-time students are required to participate in orientation activities at the beginning of their first term. The fee is charged to the student's account.

### Payment of Student Accounts

Tuition and fees are due and payable as a lump sum prior to the start of each semester. Payment will be the semester's charges less financial aid (i.e. scholarships, grants, and loans). A payment plan option is available to students in good financial standing; details are available from the Business office. Payment plan information is sent to each student prior to the start of each semester. Certain fees are applicable for students on the payment plan option, and the university reserves the right to change the fee structure as needed to fund the payment plan program.

If a student's account becomes 30 days in arrears, a notice may be given regarding financial standing. Students who fail to comply with their current payment schedule are subject to termination of enrollment. Official transcripts of academic credits are not released while any balance is owed JBU, and the university engages professional collection agencies to deal with delinquent accounts.



## Adjustment of Accounts

Students in traditional programs withdrawing from the university near the beginning of a semester are entitled to a partial refund of tuition, course fees, and music lesson fees, adjusted according to the following schedule:

- 100% refund during the first week of classes.
- 80% refund during the second week.
- 60% refund during the third week.
- 40% refund during the fourth week.
- 20% refund during the fifth week.

No refund after the fifth week.

Room and board will be pro-rated weekly over 16 weeks per semester.

Non-course fees will not be refunded after classes have begun.

In the event of medical withdrawal prescribed by a physician, special consideration will be given to tuition adjustment.

Summer courses are presented in different formats and are not subject to the above refund schedule. To receive a tuition refund for such courses, the student must complete the withdrawal before the designated class meeting.

The tuition refund policy for graduate courses and Advance modules are found in the Graduate and Professional Studies catalog.

## Music Fees

|                                 | <u>Per Semester</u> |
|---------------------------------|---------------------|
| Private Lessons:                |                     |
| One Lesson Weekly               | \$ 200              |
| Two Lessons Weekly              | \$ 400              |
| Class Lessons in Piano          | \$ 135              |
| Audio Technology, each course   | \$ 150              |
| Music Arranging with MIDI       | \$ 150              |
| Practice Room Fee               | \$ 15               |
| Key Deposit                     | \$ 25               |
| Recital/Presentation Fee        | \$ 30               |
| Recital Recording Fee           | \$ 70               |
| Accompanist Fee (1/2 recital)   | \$ 100              |
| Accompanist Fee (full recital)  | \$ 200              |
| Worship Ministries Presentation | \$ 125              |

In addition to private lesson fees, students enrolled in applied music for credit are charged tuition according to their course load. Part-time students are charged the regular tuition fee for each semester hour of credit in

music lessons; students taking more than a full-time load will be charged \$250 for each credit above 18.

A student whose JBU enrollment involves only applied music may register as a student-at-large. Regular lesson fees will be paid, but no tuition will be required. The student will receive no college credit.

## **Visual Arts Course Fees**

Certain offerings in the Visual Arts Program require a technology support fee of \$150 per course.

## **Medical Insurance**

Each student is required to have in force a medical and hospital insurance plan sufficient to cover personal needs while in college. Students who are not covered by their own plan or parent's plan may purchase the JBU Student Plan, available at a very competitive price. Brochures are mailed to each student yearly.

## **Valuables**

The university does not assume any responsibility for lost or stolen property, nor does it carry fire, theft, or damage insurance on the personal property of students. Upon arrival, students may engage one of the banks in Siloam Springs to handle financial matters and to provide safety deposit box services.

Students are required to remove all personal property from dormitories over the summer months, since the residence halls are often used by visitors.

## **FINANCIAL AID**

Each year 85% of the students attending John Brown University benefit from some type of scholarship, loan, or work program. Students seeking financial aid are required to complete the Free Application for Federal Student Aid (FAFSA). Only full-time students may receive institutional aid.

Based on information supplied by financial aid applications and official notifications from federal and state programs, the Financial Aid office will determine each student's financial aid award offer. Consideration for financial assistance will occur only after the student has received tentative or final acceptance through the Admissions office. Returning students will be awarded assistance if they are making satisfactory academic progress. To continue to receive financial aid, application for aid must be made each year. Appropriate scholarship, loan, and work awards will be made by the Financial Aid office using the policy set by the Financial Aid Committee.

Merit scholarships are available to students based on academic, leadership, athletic, and musical talent. Descriptions of eligibility criteria and availability of assistance can be found in the financial aid brochure.

Financial aid applications and information may be obtained by contacting either the Admissions or Financial Aid office. Early application is advised. The priority award deadline for applying for financial aid is March 1. Those applying after March 1 will be awarded financial aid as funds are available.

### **Financial Aid Policy**

The Board of Trustees has adopted the following policy with regard to awards of financial aid:

1. Financial aid programs funded by the institution itself are intended to supplement the various federal, state, and private donor financial aid programs administered by the institution.
2. Such institutional aid (to include athletic, academic, and leadership scholarships) will not be used to increase the total of financial aid available to the student from all sources, exclusive of any work-study or loan arrangement, beyond
  - a. in the case of a boarding student, the total cost of room, board, and tuition for the academic year,
  - b. in the case of a day student, the cost of tuition for the academic year.
3. Generally, students shall not be awarded financial aid in excess of their determined financial need. Students who do not demonstrate financial need and are eligible for tuition remission shall be eligible for only one other scholarship in addition to the tuition remission (not to exceed \$3,000). Exchange scholarship recipients through the Council for Christian Colleges & Universities or the Council of Independent Colleges (CIC) shall not be eligible for any institutional scholarships beyond their exchange scholarship.
4. Any commitment of institutional financial aid shall be expressly conditioned upon determination by the financial aid officer of the student's prior eligibility for other federal, state, and private donor financial aid, exclusive of any work-study or loan arrangement.
5. Federal regulation requires that a student must be making satisfactory academic progress regardless of whether they have previously received Federal Title IV aid.

All students enrolled at John Brown University who receive financial aid through JBU or the federal Title IV Assistance Programs must meet the satisfactory academic progress requirements, as defined below, in order to be eligible for further aid.

### **Satisfactory Academic Progress**

Satisfactory academic progress is deemed to have been made by a student who meets both the quantitative and qualitative requirements indicated below.

#### **Quantitative Requirements**

There are two quantitative requirements that the student must meet in order to remain eligible to apply for financial assistance. First, the student must pass, at a minimum, 67% of the credits attempted while attending the university. Also, the student will remain eligible to apply for aid as long as the number of credits attempted is not more than 150% of the number of credits required for the student's degree.

A transfer student may have earned credits at another school that will count toward his or her degree at JBU. Only transfer credits that apply to the student's degree will count as part of the 150% maximum. A student pursuing a second degree or teacher certification will have a new maximum time frame established based on the degree program requirements for which he or she enrolls.

The determination of each student's meeting the quantitative requirements for satisfactory academic progress will be made annually following the conclusion of the spring semester. If a student fails to pass at least 67% of the credits attempted or has attempted more than 150% of the number of credits required for completion of the degree, then the student must appeal for reinstatement of financial aid eligibility.

#### **Qualitative Requirements**

A student is deemed to have met the qualitative requirements for satisfactory academic progress for financial aid purposes provided the student's academic status is not one of Academic Suspension.

#### **Appeal Process**

If a student does not successfully meet the satisfactory academic progress policy guidelines, the Financial Aid Director will notify the student in writing of their financial aid suspension status. The student may submit a written appeal to the Vice President of Enrollment Management within 30 days of the time that the student is notified of suspension. Financial aid eligibility appeals will be reviewed by the Admissions/Financial Aid Committee on a case-by-case basis.

The financial aid eligibility appeal is a separate process from the registrar's appeal process for academic suspension. A successful appeal to reinstate a student to the university after academic suspension by the Registrar's office does not necessarily reinstate a student to the financial aid programs.

#### **Addendum to Satisfactory Academic Progress Policy**

Appeal due to mitigating circumstances: This section of the Satisfactory Academic Progress policy gives some examples where allowances may be

made for mitigating circumstances. These examples are not all-inclusive. The committee may allow other mitigating circumstances on a case-by-case basis depending on the merit of the appeal.

1. Death in the family or death of a close friend.
2. Serious illness of a family member.
3. Medical complications or prolonged illness of the student.
4. Inability to attend classes because of unexpected lack of transportation.
5. Serious financial problems requiring excessive hours of employment.

How do the following affect Satisfactory Academic Progress determinations?

1. Withdrawals: a withdrawal ('W') is counted as an attempted class that was not successfully completed.
2. Incompletes: an incomplete ('I') is counted as an attempted class that was not successfully completed.
3. Repeated course: a repeated course is counted as attempted and successfully completed if a passing grade was earned.
4. Transfer courses: transfer courses are counted as attempted and completed if the course work is applicable to the student's JBU degree.
5. Non-credit remedial course work is not applicable at JBU.

## **Maximum Time Limits for Financial Aid Eligibility**

### **Institutional Aid**

|                           |            |
|---------------------------|------------|
| Associate Degree Programs | Two Years  |
| Bachelor Degree Programs  | Four Years |

## **Competitive Scholarships**

### **The Presidential Scholarship**

Each year John Brown University awards five full-tuition Presidential scholarships to applicants who have demonstrated outstanding academic achievement. To qualify, the following must be met:

1. ACT composite score of 29 or SAT 1280
2. 3.9 cumulative high school GPA or above (on 4.0 scale)
3. Top ten percentile ranking in high school class
4. Leadership potential

Interview with the Scholarship Committee is strongly encouraged.

Presidential scholarship candidates must apply for admission to John Brown University and meet all applicable admissions requirements. The total scholarship package awarded will not exceed the cost of tuition. The scholarship is fully renewable with a 3.2 cumulative GPA.

## **The Chancellor Scholarships**

Each year John Brown University awards approximately forty half-tuition Chancellor scholarships to applicants who have demonstrated outstanding academic achievement. To qualify, the following must be met:

1. ACT composite score of 29 or SAT 1280
2. 3.7 cumulative high school GPA or above (on 4.0 scale)
3. Top fifteen percentile ranking in high school class
4. Leadership potential

Scholarship candidates must apply for admission at John Brown University and meet all applicable admissions requirements. The total scholarship package awarded will not exceed the cost of tuition. The scholarship is fully renewable with a 3.2 cumulative GPA.

## **Non-Competitive Academic Scholarships**

Scholarships ranging from \$2,000 to \$5,500 per year are awarded to new full-time students in recognition of academic achievement. Awards to freshmen vary according to ACT or SAT scores, cumulative high school grade point averages, and class rank.

Academic scholarships are renewed annually contingent upon the student having the required cumulative GPA at the end of each spring term. Time limit of eligibility is four years. A fifth year of eligibility may be granted in certain cases by the Scholarship Committee. Students on academic scholarships may be asked to tutor or to assume other academic-related responsibilities.

Scholarship application forms may be obtained by contacting the Admissions or Financial Aid offices.

## **Named Scholarships**

Many individuals and organizations have contributed funds because they believe in the university's mission and they desire to help make John Brown University affordable to academically qualified and deserving men and women. A large number of these scholarships are given in memory of friends or family and are perpetual in nature.

Criteria for scholarship awards may include need, merit, and leadership characteristics.

## **Music Scholarship and Athletic Scholarships**

Scholarships are available to students with demonstrated musical or athletic ability. Music/Choral scholarships are awarded by Music Department faculty based on major and/or participation in such groups as the Cathedral Choir, Women's Chorus, and Instrumental Ensemble. Financial

aid may be available for participation in certain sports such as men's basketball, soccer, tennis, and golf, or women's basketball, soccer, volleyball, and tennis.

### **Walton International Scholarship Program**

Education of young people shapes a nation. Soviet leaders recognized this fact and during the mid-20th century recruited many promising young scholars from third-world nations to receive free education in universities of the Eastern Bloc. The offer was eagerly accepted, and the result was that these formally educated students—their thinking now shaped by ideals of Marxism, socialism, and atheism—returned to their homelands to rise to positions of political and economic leadership.

American entrepreneur Sam Walton decried this pattern and took it upon himself to provide an alternative for these bright individuals: Come to the United States for training in economic freedom, individual responsibility, and faith. To accomplish this goal, he established programs at John Brown University and two other private liberal arts colleges in Arkansas, by which are provided 60 annual scholarships at each school for students from Central America and Mexico. Funded independently of all other university aid programs, Walton grants cover tuition, room and board, and other associated expenses. One stipulation of the scholarship agreement is that upon completion of their training, all recipients must return to their home countries for a period of time equal to that of their studies in the U.S.

Presently entering its twenty-fourth year, the program is a resounding success. Nearly 1,100 students from Central America and Mexico have received the scholarship, and a very high percentage have completed bachelor's degrees and returned home, where the value of an American education is unmistakable. John Brown University's graduates of the Walton Scholarship Program have attained noteworthy positions in business, engineering, politics, computer science, journalism, education, and ministry. Mr. Walton's dream is being fulfilled.

Mr. Ronald Johnson directs the Walton International Scholarship Program at John Brown University.

### **Federal and State Financial Aid Programs**

The federal government sponsors student assistance programs to those who have demonstrated financial need. Through the Federal Pell Grant Program, students may receive as much as \$5,350 per year, based on authorization from Congress. Many students also are able to take advantage of the Federal Perkins Program and secure long-term, low interest (5%) loans for educational expenses.



Students may also be eligible for assistance from other sources, such as the Federal Supplemental Educational Opportunity Grant Program (SEOG), the Federal Work-Study Program, and Federal Stafford Student Loans.

Many states also participate in student aid programs for residents attending college either in or out of the state. Arkansas residents may be eligible for the Arkansas Governor's Distinguished Scholarship (GDS) in the amount of \$10,000. The Arkansas Department of Higher Education also administers the Arkansas Academic Challenge Scholarship Program. This grant program offers first-time freshmen a four-year renewable scholarship in the amount of \$2,500 the first year and increases each year. Contact the Financial Aid office for details.

Students may qualify for a low interest Federal Stafford Student Loan (subsidized or unsubsidized) to help cover both direct and indirect costs of education. Award amounts are based on financial need.

## **Veterans Administration Benefits**

John Brown University is an approved institution for veterans and veterans' beneficiaries training. Veterans, widows, and children of veterans who lost their lives in service, or veterans who are now disabled as a result of service should contact the nearest Veterans Administration Regional Office as far in advance of enrollment date as possible for assistance in securing Veterans Administration benefits. Information regarding this program may be obtained from the JBU registrar.

## **Air Force and Army ROTC Scholarships**

Scholarships are available to qualified applicants. Scholarships pay tuition—there may be allowances for books and additional expenditures. Selection is based on academic record, ACT/SAT entrance scores, leadership potential, a physical exam, and a personal interview. Preferences are given to technical fields and nursing, but all disciplines may apply. For further information, refer to pages 34-36.

## **Student Employment**

Students may qualify for employment through the university by completing the Free Application for Federal Student Aid (FAFSA). Students with the greatest amount of determined financial need will be given preference for institutional employment. Employment positions are available throughout the university.

Students interested in seeking employment on campus must contact the Financial Aid office. Employment will be awarded as part of the financial aid package. Job assignments for upper-classmen will be made in



accordance with student class schedules, position preference, and supervisor recommendation. All students are assigned a service-oriented position for the first year and may choose to work in food service, grounds, custodial services, or the maintenance department. These areas, vital for the daily operation of the university, require large numbers of student workers in order to function effectively. Work time is usually limited to eight hours per week. Paychecks are issued to students once each month for hours worked under the work program. Students may apply their earnings toward their school accounts.

Work-study participants must maintain a 2.0 cumulative grade point average to remain eligible for the full program. Students failing to maintain the required GPA will be limited to five hours of work per week.

### **Concurrent High School Enrollment**

Each semester, JBU offers high school juniors and seniors an opportunity to take college courses at a reduced cost. The number of courses available and the number of students who may participate is limited. Students selected may enroll for one course per term. Students who later enroll as full-time freshmen at John Brown University will receive a tuition credit equal to the monies they had paid for concurrent enrollments, up to \$1,000.

The Concurrent High School Enrollment application form is available through the Admissions office. Applicants must have a 3.0 cumulative high school grade point average and must provide high school transcripts and a completed reference form from their high school counselor. The application deadline for the fall semester is August 10, and January 1 for the spring.



# ACADEMIC POLICIES

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## Students Subject to the Catalog Provisions

All students are subject to the provisions of the catalog which was in effect at the time of their first enrollment at John Brown University, with the exception of charges for tuition, etc., which apply only for a specified period of time. However, students may change to a later catalog with approval of their advisor and division chair by completing a Change of Catalog form in the Registrar's office. Students may submit a Change of Catalog form until they have completed 75 hours. After that point, no further catalog changes will be permitted except in the case of an extended absence. (See page 76.)

## Changes in Requirements and Regulations

The university reserves the right to make modifications in policies, procedures, and regulations: e.g., grading system, transfer of credit, guidelines for degree requirements, housing regulations and charges, tuition and fees, and admission standards, and to make such modifications applicable to any or all currently enrolled students. When modifications occur, sensitivity to reasonable dates of implementation and appropriate categories of currently enrolled students affected will be exercised. Students will be notified of such changes through the advisers, written notices, and campus publications.

## Course Credits

The basic unit of course credit is the semester hour. One semester hour of credit normally represents participation by the student in the activities of one fifty-minute class period per week for 15 weeks together with adequate preparation through the use of approximately two hours outside of class for each period in class. Where additional supervised time is required such as for laboratories or listening sessions, an extended period of two to three hours may replace one regular class period. One hour of practicum credit requires weekly involvement of three to five hours, depending on the nature of the assignment.

## Orientation

Orientation activities for all new students begin before fall registration and may continue into the semester. The goal of the Orientation Program is to help each student make a smooth transition to college life at JBU.

## **Full-Time Student**

A full-time student is one who is enrolled for 12 or more semester hours.

## **Classification of Students**

A student will be classified as a sophomore when at least 30 semester hours of course work have been completed; junior - 60 hours; senior - 90 hours.

## **Summer Terms**

John Brown University offers a four-week May term which begins the Monday after spring commencement. Students may earn as many as six credit hours, with most available courses satisfying requirements in the Core Curriculum. Summer tuition for undergraduate work is one-half the regular credit hour rate. Housing and meal plans are available on campus during the session.

## **Credit by Examination**

Means of establishing credit include the College-Level Examination Program (CLEP), Advanced Placement Programs (AP), International Baccalaureate Program (IB), and in some cases, teacher-made examinations. A maximum of 30 semester hours of such credit may be applied toward the bachelor's degree; 15 maximum for the associate's degree. A student may not take a nationally recognized standardized examination (as listed above) if the student is currently enrolled in the equivalent course on the first day of the semester. Details about examination approval and course equivalence are available from the registrar. Graduating seniors must have completed all CLEP exams before the first day of their final term in residence. CLEP exams are administered by the Office of Academic Assistance.

## **Availability of Courses**

Accompanying the description of each course in the back section of this catalog is an indication of the semester in which the course is to be offered. This data is subject to occasional modification. Accordingly, the university reserves the right to withdraw, with reasonable notice, any course offering for a particular semester.

## **Independent Study**

Independent study courses are those in which students do not meet in a typical classroom setting but study independently under the regular

supervision of a full-time faculty member. The topic of study may be an area of special interest normally outside of the existing curriculum. A student must complete an Application for Independent Study from the Registrar's office. Approval must be provided by the professor supervising the independent study, the student's advisor, and the chair of the division in which the course resides. A non-refundable fee of \$99 per semester hour will be charged to the student. In some special circumstances, the division chair may waive the fee. The student will pay all normal per-credit tuition charges for hours below 12 or above 18 hours.

### Prerequisites

Students are not permitted to enroll for courses for which they have not completed all prerequisites. A prerequisite course must have been completed with an acceptable passing grade before enrollment in the given course is permitted. A corequisite is a course in which a student must be enrolled and satisfactorily participating simultaneously to the given course.

### Required Enrollment in Specific Core Curriculum Courses

All regularly enrolled students must complete both of the freshman level Core Curriculum Bible courses by the end of their first two years of attendance.

All regularly enrolled students except those in associate degree programs must enroll for EGL 1013 and EGL 1023 during their first two semesters of enrollment. However, some students are required to complete English as a Second Language before enrolling in EGL 1013.

All new students must complete the Gateway Seminar in Christian Scholarship during their first semester of attendance.

### Maximum Course Load

The normal maximum semester load is 18 credit hours, but the student's grade point average affects the limit for the next term. A full-time student who earns a 3.0 GPA during a semester at JBU will be permitted to enroll for an increased load. First-time freshmen students are limited to a maximum of 18 hours during their first semester.

| <u>GPA</u>                         | <u>Next semester maximum</u> |
|------------------------------------|------------------------------|
| Sem 3.0 to 3.24                    | 19 semester hours            |
| Sem 3.25 to 3.49                   | 20 semester hours            |
| Sem 3.5 or better                  | 21 semester hours            |
| Cum Below 2.0 (Academic Probation) | 15 semester hours            |

Enrolling for any credit hours beyond 18 in a semester will incur additional tuition charges at one-third the regular per-hour rate, regardless of prior grade point average. Enrollment for more than 21 hours is permitted only upon approval of a petition to the Associate Dean of Academic Services.

The maximum summer term load is six credit hours. A student whose grade point average for the previous semester was 3.25 or better may petition to enroll for additional hours.

### **Late Enrollments**

Any student who enrolls after the close of the regular registration period may be subject to limitations in the course load. No student is permitted to enroll for the semester after the end of the tenth day of classes.

### **Auditing Classes**

Students may register for courses on a non-credit or audit status, provided the proper procedure is followed, either at initial registration for the semester, or by official change of registration prior to the stated deadlines. The names of such students will be entered on the class roll, and the class appears in the student's academic record, but without credit and with a final grade of 'S' or 'U'. It is the responsibility of the student to obtain a statement of grading criteria for satisfactory participation from the instructor. Tuition is charged at one-half of the rate of for-credit registration and subject to the same regulations.

The last day to add a course under 'audit' status and the last day to change a course from 'audit' to 'credit' status is the last day to add a course. The last day to change from 'credit' to 'audit' status is the last day to drop a course.

### **Adding and Dropping Courses**

Courses may be added after initial registration, provided the procedure is completed by the close of the second week of classes. Courses dropped by the approved procedure before the end of the eighth week of classes will not appear on the permanent record. Non-completion of a course thereafter will result in a letter grade based upon the student's performance relative to the required work for the complete course.

### **Withdrawal from the University**

A student may petition for permission to withdraw from all course work for a semester after the last date to drop a course. Such a petition should be directed to the Associate Dean of Academic Services.

Every student withdrawing from the university before the end of a semester is required to obtain from the Student Development office an Application for Withdrawal and have it properly signed by the necessary officials and returned to the Registrar's office. Failure to execute such an application may result in refusal to grant any possible refunds to the student.

In the event of withdrawal from school, courses are posted on the transcript with each showing a grade of 'WP' (withdrew, passing) or 'WF' (withdrew, failing). No credit is earned for the term.

### **Transcripts**

An official transcript of a student's academic record may be obtained by submission of a written request to the Registrar's office, provided the student has made satisfactory arrangements with the Business and Financial Aid offices with respect to financial obligations. Transcripts are not released unless the student grants permission through a signed statement.

The first official transcript is issued without charge; a \$2 charge is incurred for each transcript thereafter.

### **Access to Education Records**

The Family Educational Rights and Privacy Act of 1974 (FERPA) extends to all former and presently enrolled students at John Brown University the right of access to certain educational records maintained by the institution. Student rights include a) inspection and review, b) explanation or interpretation of contents, c) duplication of the record at a standard fee, and d) a formal hearing, if necessary, to challenge the contents of any such record.

## **ATTENDANCE REGULATIONS**

### **General Policy**

A student must be registered for a class and on the official roster in order to attend. This includes students who are attending under audit status. (See Auditing Classes, page 58.)

Attendance at and participation in all class sessions, except for times when students are absent for reasons beyond their control, is regarded as essential. Class activities are planned for the benefit of all students.

### **Classroom Demeanor**

Students are expected to display classroom behavior that is appropriate to a Christian university. A professor may remove a student from a class if, in

the professor's judgment, the student displays behavior that is uncivil, defiant, or otherwise disruptive to the classroom learning environment. Students dismissed from a class may not return to the class without the permission of the professor. Students may appeal any such removal by following the Academic Grievance process outlined in the Student Handbook.

## Results of Failure to Attend Class

A grade of 'F' is given for any course in which a student has missed half or more of the class meetings, whether the absences are excused or unexcused, unless the student has completed withdrawal from the class before the stated deadline. An absence is recorded for each class missed by a student, including the first meeting of a class following registration, regardless of the reason for the absence. The responsibility for attending class rests with the student.

**Excused Absences.** Students will be allowed to make up for full credit work missed because of an excused absence. Under the following circumstances an absence will be excused:

- a. *Death or serious illness in the immediate family.*
- b. *Participation in intercollegiate athletics events.*
- c. *Class field trips which are required as class assignments.\**
- d. *Club trips which are designated as educational in nature.\**
- e. *Trips sponsored or sanctioned by university authorities as university business.*
- f. *Trips required by Armed Services or the Veterans Administration.*
- g. *Local emergencies requiring the immediate attention of certain students.*
- h. *Other reasons which are acceptable to the instructor.*

Absence due to illness of the student does not necessarily qualify as excused. Each instructor has the prerogative to establish policy on this issue. The policy is to be clearly stated in the syllabus at the beginning of the semester.

Other absences are considered unexcused.

**Procedure for Excused Absences.** Although the instructor is obligated to allow the student to make up for full credit work missed because of an excused absence, such credit must be established through the initiative of the student in accomplishing the work to the full satisfaction of the instructor. Prior notice is expected for any known activities which will interfere with class attendance. It is the responsibility of the student to notify the professor in advance of any class activity that will interfere with class attendance. Such notification must be made in a manner consistent with the stated expectations in the professor's course syllabus.

\*Professors and club sponsors must propose educational trips to the Dean of Undergraduate Studies for approval as excused absences. Educational



trips should be planned in such a way as to minimize potential conflicts with other classes as much as possible.

**Unexcused Absences.** Faculty members are neither obligated nor expected to permit a student to make up work missed because of unexcused absences, including unexcused absences for which no penalty is assessed in accordance with the attendance policy. If a student is allowed to make up such work, full credit may not be allowed.

The number of unexcused absences in a course may be used as a factor in determining a student's grade. It is the obligation of the instructor to explain the policy at the beginning of the course. If the student attends more than half of the class meetings and thus is eligible for credit, the attendance factor may not exceed 25 percent of the total grade basis in the course.

### **Non-Attendance Resulting in Withdrawal**

Except in case of extenuating circumstances, students who do not attend any class for ten consecutive days may be withdrawn from John Brown University for non-attendance. It is the responsibility of the student to contact instructors, advisor, registrar, Business office, Financial Aid, and Student Development if extenuating circumstances exist. Courses will not be recorded if the withdrawal occurs before the eighth week of the semester. Students will have a grade of 'WP' (withdrawn, passing) or 'WF' (withdrawn, failing) recorded if they are withdrawn after the seventh week of the semester.

### **Chapel Attendance**

Chapel is an essential part of fulfilling John Brown University's basic mission of providing "Christ-centered higher education," and therefore attendance is a requirement for all students (see Student Handbook). The purpose of Chapel is to gather the university family in the context of worship to better know, love, and glorify God, to gain His perspective on our learning, and to grow together as a Christ-centered community while committing ourselves to serving in the world as Jesus' disciples. Chapel is not a replacement for participation in a local church, and students are encouraged to find a home church while at JBU. Students are also encouraged to take part in the various ministry and discipleship opportunities provided through the university Student Ministries office.

### **Academic Integrity**

As a Christian institution of higher education, John Brown University seeks to maintain the highest standards of academic integrity. Violations of these standards will result in substantial penalties. The university is responsible to clearly articulate the Academic Integrity Policy to students and faculty by

publishing it in the Student Handbook, in the Faculty Handbook, and by informing all first-year students of this policy. Faculty are to reference the policy in their course syllabi. However, the primary responsibility for knowledge of and compliance with this policy rests with the student.

## Grading System

Indication of each student's progress is reported regularly by instructors. The grading scale used as a basis for letter grades is established by the instructor of each course.

### Grade Points per Semester Hour (effective Fall 1999)

|                               |     |
|-------------------------------|-----|
| A Superior Accomplishment     | 4.0 |
| A-                            | 3.7 |
| B+                            | 3.3 |
| B Commendable Accomplishment  | 3.0 |
| B-                            | 2.7 |
| C+                            | 2.3 |
| C Satisfactory Accomplishment | 2.0 |
| C-                            | 1.7 |
| D+                            | 1.3 |
| D Minimal Accomplishment      | 1.0 |
| F Failure                     | 0.0 |

The following are not included in grade point average:

|                      |                      |
|----------------------|----------------------|
| I—Incomplete work    | S—Satisfactory       |
| NC—No credit earned  | U—Unsatisfactory     |
| WP—Withdrew, passing | WF—Withdrew, failing |
| W—Withdrew           |                      |

An incomplete ('I') grade must be made up within 30 days after the official grade reporting date. After the 30 days, the incomplete grade will be changed to a grade of 'F'. In extenuating circumstances, the instructor may request an extension date from the Associate Dean of Academic Services. An 'F' grade that results due to a grade of incomplete 'I' may be changed upon approval of the instructor and the Dean of Undergraduate Studies.

When an 'F' grade has been received (other than an incomplete 'I' grade changed to 'F'), credit cannot be secured for work without repetition of the entire course.

## Internship Grading

Internships and practicums may be evaluated using standard letter grades. However, because of the subjective nature of the experiences, grades of 'S' or 'U' normally are assigned. Credit hours accrue in either case.

## Grade Renewal

A student may repeat any course on his or her academic record with prior approval of the department and the registrar, with the understanding that all courses and grades will remain on the permanent record. However, only one taking of the course may contribute hours to the total for graduation, and only the last grade received will be included in the calculation of the student's grade point average. If the student receives permission and renews a grade by means of transferring an equivalent course from another institution, the completed course is posted with a grade of 'CR', and any prior attempts are excluded from graduation hours and the grade point average.

## SCHOLASTIC AWARDS

### Recognition of Superior Achievement

Full-time students attaining certain standards of scholastic achievement are placed on the President's or the Dean's List of Distinguished Students at the end of each semester, and attention is drawn to them through various media. To qualify for the Dean's list, the student must have at least 3.4, and at least 3.8 for the President's list.

### Degree Honors

Upon completion of an associate's or bachelor's degree, each graduate who has attained a cumulative grade point average of 3.6 or above is recognized with an appropriate degree honor. Eligibility is contingent upon completion of at least 60 semester hours of graded course work at John Brown University. Graduation honors are indicated on the diploma and by the wearing of an appropriate medal on the gown during commencement exercises.

Cum Laude—Grade point average at least 3.6

Magna Cum Laude—Grade point average at least 3.8

Summa Cum Laude—Grade point average at least 3.9

Students who have between 39 and 59 semester hours of graded course work at John Brown University and have a grade point average of 3.8 or higher will graduate "with distinction."

### University Honors Degree

Each student who has successfully completed twenty-one hours of honors courses (as outlined under Honors Scholars Program, page 23) will be granted a diploma certifying that he or she has earned a university Honors degree. Such graduates will be identified in the commencement program.

## **Vera and Spencer Bartlett Respect Awards**

These awards, in memory of Vera and Spencer Bartlett, are presented each spring to students who are judged to best exemplify the greatest respect for God, for the United States of America, and for other people. To be eligible, a student must be a junior continuing into their senior year, a citizen of the United States, and must have average grades or better.

## **Alpha Chi**

Membership in Alpha Chi National College Honors Society is open by invitation to outstanding juniors and seniors. The John Brown University chapter, Arkansas Lambda, is affiliated with the National Alpha Chi Council.

## **ACADEMIC PROBATION AND REQUIRED ACHIEVEMENT FOR CONTINUED ENROLLMENT**

1. A student with a cumulative grade point average (CGPA) less than 2.0 will be placed on probation the following semester.
2. The maximum enrollment per semester for any student on academic probation is 15 semester hours. Students should understand that such limited enrollment may lengthen the time required to meet graduation requirements.
3. A student whose CGPA is still below 2.0 after being on probation for two successive semesters, or a student with less than a 1.0 semester GPA, will be suspended unless a petition for re-enrollment is approved by the Committee on Scholastic Petitions.
4. A student may enroll after one semester of academic suspension if a petition is approved by the Committee on Scholastic Petitions.
5. A student who is permitted to re-enroll after academic suspension may continue to re-enroll if satisfactory progress is being made toward a 2.0 CGPA as determined by the Committee on Scholastic Petitions.
6. A student on academic probation may remain eligible for some types of financial aid, if standards for Satisfactory Academic Progress are met (see page 48).

## Appeal Procedure

Occasionally a student may wish to appeal an academic action such as a grade, graduation requirement, or withdrawal penalty. Such appeals should be made in writing to the appropriate dean. In most cases the student should first request the support of their major advisor, department head, or division chair.



# DEGREE REQUIREMENTS

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John Brown University offers four-year courses leading to the following degrees: Bachelor of Science (B.S.), Bachelor of Arts (B.A.), Bachelor of Science in Engineering (B.S.Eng.), Bachelor of Science in Education (B.S.E.), and Bachelor of Music Education (B.Mus.E.). Also offered are two-year courses leading to the Associate of Arts (A.A.) and Associate of Science (A.S.) degrees.

Requirements which apply to all degree programs are set forth in this section. Requirements applicable to specific degree programs are stated in the curricular outlines which appear in the divisional sections of the catalog, except that teaching degree requirements are found in the Division of Education. Most departments also have available suggested schedules which indicate the courses taken in each semester in a typical program.

The final responsibility for meeting all degree requirements rests with the student.

## REQUIREMENTS FOR THE BACHELOR'S DEGREE

### Education at John Brown University

John Brown University provides an education that integrates the disciplinary studies selected by the student (the major field) with a more broadly based selection of educational experiences for each student. This combination of the specific with the more general is founded on JBU's educational philosophies and goals.

John Brown University holds that higher education and career preparation are not synonymous. While JBU has traditionally emphasized preparation for well-defined careers, it has done so within the context of a liberal arts college. Consequently, a John Brown University education consists of three elements: the major, the Core Curriculum, and the co-curriculum. The courses in the major prepare the student for a career or for graduate school, while the Core Curriculum presents a broad exposure to human learning, an appreciation of which is characteristic of the balanced, whole college graduate. Many aspects of the model of wholeness are not addressed in either the major or the Core. Therefore, the extra- or co-curricular aspect of the college experience—the co-curriculum—is an important component of JBU's education program.

### THE CORE CURRICULUM

The notion of a Core Curriculum is rooted in a Christian understanding of humanity. As bearers of God's image, humans were created to be thinking,

valuing, culture-forming beings. The traits that a Core Curriculum seeks to instill—a deeper understanding of creation and culture, a sharpened intellect, a broadened imagination—enhance our ability to glorify our Creator. In short, liberally-educated Christians are better prepared to be image-bearers of God and effective agents of God's Kingdom in today's world.

A Core Curriculum in the liberal arts and sciences, therefore, plays a central role in John Brown University. While not necessarily more important than other facets of the university (such as major and minor fields of study, chapel, co-curricular opportunities, and residence life), the Core Curriculum provides a common base of educational experience for all students and draws connections between the various fields of study that students will explore.

## GOALS OF THE JOHN BROWN UNIVERSITY CORE CURRICULUM

The Core Curriculum seeks to equip students to . . .

### HEAD

1. Apply biblical truth and a Christian worldview to all areas of study.
2. Appreciate the complexity and diversity of creation and culture.
3. Understand and apply multiple approaches to discovering truth.
4. Critically evaluate ideas and arguments.
5. Communicate effectively in speech and in writing.
6. Discern and appreciate beauty in the arts and sciences.
7. Draw connections between various subjects of study.
8. Become lifelong learners.

### HEART

9. Develop a mature, discerning Christian faith.
10. Demonstrate Christian character in all areas of life.
11. Build and nurture healthy relationships.
12. Understand and practice emotional maturity.

### HAND

13. Serve others.
14. Practice Christian stewardship of their bodies, time, and other resources.
15. Apply Christian ethics to society and the environment.
16. Participate through their vocation in God's creative and redemptive purposes in the world.

In order to accomplish these goals, the Core Curriculum seeks a middle ground between the extremes of a common Core and a cafeteria system. Its basic philosophy is to provide all students with a common set of Core



classes during their early years, allow them to choose from a variety of courses within basic subject areas during their middle years, and culminate their college experience with a series of upper-level common courses, as shown below.

## CORE CURRICULUM COURSES

### 1. Lower-Level Core Classes—25 hours

|     |      |  |
|-----|------|--|
| BBL | 1013 | Old Testament Survey                       |
| BBL | 1023 | New Testament Survey                       |
| COR | 1002 | Gateway Seminar in Christian Scholarship   |
| COR | 1012 | Wellness                                   |
| EGL | 1013 | English I: Composition                     |
| EGL | 1023 | English II: Literary Analysis and Research |
| HST | 1013 | Western Civilization I                     |
| HST | 1023 | Western Civilization II                    |
| POL | 2113 | American Government                        |

### 2. Elective Core—19-22 hours

Students select from among the approved course offerings that satisfy requirements in the following areas. These offerings are subject to change as new courses are developed. Students should consult the online catalog for the most current list.

- Wellness Activity—1 hour

|     |         |                           |
|-----|---------|---------------------------|
| COR | 1111-91 | Wellness Activity Courses |
|-----|---------|---------------------------|

- Natural Science—6 hours (students select three hours from Life Sciences and three hours from Physical Sciences)

*Life Science options:*

|     |      |                    |
|-----|------|--------------------|
| BIO | 1003 | Biological Science |
| BIO | 1124 | Cell Biology       |
| BIO | 2134 | Animal Biology     |

*Physical Science options:*

|     |      |                           |
|-----|------|---------------------------|
| CHM | 1014 | Fundamentals of Chemistry |
| CHM | 1124 | General Chemistry I       |
| GSC | 1023 | Physical Science          |
| GSC | 1033 | Astronomy                 |
| PHY | 2114 | General Physics I         |

- Mathematics—3 hours

|     |      |                                       |
|-----|------|---------------------------------------|
| BUS | 2193 | Business Statistics                   |
| MTH | 1003 | Quantitative Literacy                 |
| MTH | 1123 | Survey of Calculus                    |
| MTH | 1134 | Calculus I                            |
| MTH | 2103 | Statistics with Computer Applications |
| PSY | 2383 | Introductory Statistics               |

## JOHN BROWN UNIVERSITY

- Philosophy—3 hours
  - POL 3003 Political Philosophy
  - RPH 3003 Introduction to Philosophy
- The Arts—3 hours
  - ART 2153 European Arts and Culture
  - ART 2163 Irish Art and Culture
  - ART 2233 Art History I
  - ART 2333 Art, Design, and Creativity
  - ART 2343 European Art Tour
  - COM 2083 Masterpieces of Film
  - MUS 1203 Liberal Arts Foundations for the Musician
  - MUS 2003 The Arts in Western Culture
  - MUS 3003 Masterpieces of Music
- Social Science—3 hours
  - ECN 2003 Basic Economics
  - ECN 2123 Principles of Macroeconomics
  - ECN 2533 Economics and Society of Central America
  - ECN 2543 Economics and Society of Ireland
  - ED 2133 Educational Psychology
  - FAM 2123 Psychology of Relationship Development
  - PSY 1013 Introductory Psychology
- Global Studies—0-3 hours
  - BBL 3583 Perspectives on the World Christian Movement
  - ECN 4103 International Economics
  - EN 3513 International Problem Solving in Engineering and Business
  - GSC 3003 Global Stewardship
  - ICS 2991/93 <sup>1</sup>Study Abroad Experience
  - ICS 3173 Selected Topic: History and Culture of Ireland
  - ICS 4113 Intercultural Family Seminar
  - LS 1593 Contemporary Latin America
  - MKT 3153 International Marketing
  - POL 3413 Selected Topics: The European Union
  - RPH 3533 Introduction to Islam
  - SST 1133 Cultural Geography
  - SST 1143 World Regional Geography
  - > Three hours of intermediate-level modern foreign language
  - > A four-week minimum study abroad program
  - > A cross-cultural internship as determined by one's major or minor
- 3. Upper-Division Core Classes—8 hours
  - BBL 3003 Evangelical Theology
  - BBL 4002 Capstone Seminar in Christian Life
  - EGL 4003 Masterpieces of Literature

<sup>1</sup>Students who plan to spend a minimum of four weeks in a cross-cultural experience may take ICS 2991/93 Study Abroad Experience as an Independent Study course to fulfill their

## DEGREE REQUIREMENTS

Global Studies requirement. The student must arrange to complete ICS 2991/93 before participating in the cross-cultural experience. Further information is available through the International Programs Office.

### **Global Studies Exemptions**

International students are exempt from the Global Studies requirement. Students from the United States who have had significant cross-cultural life experiences may qualify for Global Studies exemption. Such students should consult the Global Studies Exemption form on the JBU registrar web site at <http://www.jbu.edu/academics/registrar/forms/> to determine if they have sufficient cross-cultural experience to apply for exemption.

### **Sequencing of Core Curriculum Courses**

The Core Curriculum is designed to function as an interrelated whole. Thus the courses are sequenced, with some serving as prerequisites to others. Instructors in upper-level courses are able to assume a base of knowledge and understanding and use that as a foundation on which to build. In particular, the Gateway Seminar in Christian Scholarship introduces students to the Core Curriculum and establishes a Christian framework for education. The Capstone Seminar in Christian Life culminates the Core Curriculum experience and prepares students to be active participants in the Kingdom of God. Thus, the Capstone Seminar must be taken at John Brown University.

### **Core Curriculum Course Exemptions**

Students in some degree programs that are subject to external accreditation requirements are granted exemptions to certain Core Curriculum courses. All such exemptions are listed in the catalog section pertaining to the particular degree program.

## **THE CO-CURRICULUM**

Complementary to and supportive of the Core Curriculum is the Co-Curriculum. The Core and Co-Curriculum have many of the same goals, some of which, especially those of the spiritual, social, and emotional dimensions, are more strongly addressed through the Co-Curriculum. Co-curricular components include Freshman Orientation, the Chapel program, student organizations (e.g., SGA, Cause Ministries, Residence Hall Associations), growth and support groups (Passion), lectureships and other special events, counseling, the Career Development Center, the Academic Assistance Program, forums, and other out-of-class programs presented by the faculty and staff, the Lyceum Artists Series, intramural sports, Residence Life programs, programming for married students, the Soderquist Center for

Leadership and Ethics, the Center for Relationship Enrichment, and the student leadership programs.

The Core Curriculum and Co-Curriculum are mutually reinforcing and interdependent.

## **ADDITIONAL REQUIREMENTS FOR THE BACCALAUREATE DEGREE**

### **Entrance Assessment**

All entering students, including transfers, are required to participate in appropriate assessment activities. These include, but are not limited to, the CIRP (a freshman survey used nationwide) and the Student Relationship Assessment. Students are re-tested as seniors (see Exit Assessment, page 74), and the results are used as the basis of a longitudinal study.

### **Major Subject Area**

The undergraduate major defines the primary focus for a bachelor's degree. Every bachelor's degree is associated with the fulfillment of the requirements of at least one major program. Typically, requirements for a major program constitute about one-third of the bachelor's degree requirements, the Core Curriculum another third, and the remaining third of the bachelor's degree is available for supporting course work, electives, or minors in fields outside the major. Some majors, especially those programs designed to prepare students for specific professions (e.g., Construction Management and Education), may require most of the course credits not used to meet Core Curriculum requirements, while those programs most oriented toward the liberal arts will generally seek to maximize the opportunities for students to select from a broad range of course work.

Each bachelor's degree program requires a minimum of 36 semester hours in the major field, including a minimum of 18 hours of upper-division courses—at least two courses of which must be taken in residence at John Brown University. The division chair or department head has the prerogative of approving substitutions for courses specified by a major department.

In order to ensure that the major field constitutes a unique body of credit, the major field must include 24 or more semester hours of course work not counting toward any other degree requirements in the major field, Core Curriculum, other majors, minors, or concentrations.

## DEGREE REQUIREMENTS

Most bachelor's degrees require a minimum grade point average of 2.25 for major area course work. The Division of Education requires a 2.5 average for professional education and specialized field courses.

### **Minor Subject Area**

An undergraduate minor is a formally recognized aggregate of courses in a designated secondary subject area, discipline, or interdisciplinary program usually outside of (but often complementing) the student's degree major and in which knowledge is gained in a coherent pattern of courses.

Completion of a minor requires 18 to 21 semester hours, in accordance with the department's specifications, including at least six hours of upper-division courses. In order to ensure that the minor field constitutes a unique body of credit, the minor field must include 12 or more semester hours of course work not counting toward any other degree requirements in the major field, Core Curriculum, other minors, or concentrations. The minimum grade point average for course work in the minor is 2.0.

### **Upper-Division Courses**

Each candidate for a bachelor's degree is required to submit a minimum of 35 hours in upper-division (junior-senior) courses, identified by numbers 3000 and above. Included in this total are the eight upper-division hours specified in the Core Curriculum, courses in the major and minor fields, as well as electives.

### **Foreign Language**

In general, Bachelor of Arts curricula specify 12 semester hours in one foreign language; however, a specific curriculum may permit a combination of two languages. New Testament Greek fulfills the language requirement in the Biblical Studies curricula and may substitute for modern foreign language in other majors, given written approval of the department head. High school or other credit in languages may establish a waiver of part of this requirement.

Most Bachelor of Science programs do not require foreign language.

### **Minimum Total Semester Hours**

Completion of any bachelor's degree at John Brown University requires at least 124 hours of academic credit. Certain programs exceed the minimum.

Sufficient course work must be completed to offset any deficiency in total number of semester hours, in addition to all other specific requirements, preferably in an area which will enrich and broaden the student's

acquaintance with the major areas of knowledge and/or strengthen mastery of a field of concentration.

### **Grade Point Average**

The grade point average of all degree work must be at least 2.0, in the minor subject at least 2.0, and in the major subject at least 2.25. Education Division programs require a cumulative GPA of at least 2.5, and at least 2.5 in professional education, the teaching field, and any other state-required courses.

### **Exit Assessment**

All seniors are required to participate in designated assessment activities as a condition of graduation. Such activities may include, but are not limited to, the CCS (a survey of college seniors used nationwide), a standardized test in the student's major field, and exit interviews with faculty members in the student's major department and/or members of the Core Curriculum Committee.

### **Application for Graduation**

An Application for Graduation form, available online as part of pre-registration, should be completed when registering for the final semester in residence before completion of degree requirements. This application provides information regarding the graduation fee, exit assessment requirements, and a final check of the student's name as it is to appear on the diploma and in the commencement program.

### **Participation in Commencement Exercises**

Degree candidates may participate in commencement exercises only upon completion of all degree requirements no later than the last day of the semester. Any course work in progress at other institutions must be completed during terms ending no later than one week following JBU commencement. If grades for the transfer work will not be reported at least five weeks prior to commencement, the student must complete and return to the registrar a Commencement Participation Approval form available in the Registrar's office. Deadline for returning this form is specified on the JBU commencement web site. Students enrolled at JBU who complete their degree during their final semester of attendance are only eligible to participate in the commencement ceremony held at the end of that semester.

For students who leave JBU with unmet degree requirements, eligibility to participate in commencement is limited to the commencement at the end of the following semester. Students not enrolled at JBU during the

semester in which they plan to graduate must contact the Registrar's office in writing during the first two weeks of the semester, declaring their intention to participate in commencement. Failure to do so may result in the student not being listed in the commencement program. Furthermore, participation eligibility is dependent upon compliance with all of the deadlines posted on the JBU commencement web site.

### **Residence Requirements**

Fulfillment of the residence requirements for the bachelor's degree from John Brown University consists of the following:

1. Completion (after achieving junior standing) of at least two full-time semesters in residence.
2. Completion (by means of courses taken in residence) of at least 36 of the final 45 semester hours of credit presented in fulfillment of degree requirements. CLEP credit is not considered as "taken in residence."
3. Completion in residence of at least two upper-division courses constituting four or more credit hours in the major field.

### **Correspondence and Extension Work**

A maximum of 30 hours of degree credit may be earned through correspondence and extension work. Each course must include a proctored exam and must be approved in advance by the major advisor and registrar. Approval forms are available in the Registrar's office.

The Education Division chair must approve all correspondence courses related to professional education.

### **Transfer of Credit**

Credit which has been earned at another institution will be reviewed by both the registrar and the appropriate division faculty, and the applicability to courses in the chosen degree program will be determined. Each course accepted for transfer must have a minimum grade of 'C'. All work completed at previous institutions will be posted as 'CR' on the student's JBU transcript. Thus, only JBU course work will apply toward the student's grade point average.

John Brown University accepts credit from regionally accredited institutions and Bible credit from schools accredited by the Association for Biblical Higher Education (ABHE). Transfer credit from Internationally affiliated institutions are evaluated on a case by case basis.

Currently enrolled students planning to take summer courses or correspondence work at other institutions must receive prior written



approval of the major advisor and the registrar. Official course descriptions of proposed work are required.

### **Maximum Experiential Credits**

The maximum total credit allowed for vocal and instrumental ensembles toward the requirements of a bachelor's degree is eight hours for music majors and four hours for non-music majors; two hours may apply to associate's degrees. The maximum allowed for broadcasting and journalism practicums is twelve hours toward bachelor's degrees in Communications, six toward other bachelor's or associate's degrees in Communications, and three toward other associate programs. Most students pursuing biblical degrees are required to earn four Biblical Studies internship credits; however, these students are permitted to earn as many as six hours, and the Youth Ministry degree requires a nine-credit experience. Majors outside the division may include a maximum of three Biblical Studies internship hours.

### **Requirements for Additional Bachelor's Degrees**

For two bachelor's degrees, a minimum of 154 semester hours must be completed, incorporating all program specifications. Students completing two degrees may fulfill the Core Curriculum requirements of the degree program with the fewest Core requirements. At least two upper-division courses in the second major field must be taken in residence at JBU. A maximum of 36 credits by exam may be included. All other stipulations of the residence requirements apply to the second as well as to the first degree. A third bachelor's degree requires completion of a minimum of 184 semester hours.

### **Graduation Requirements after Extended Absence**

In general, a student is required to graduate under the requirements of a catalog, which is current at the time of graduation. Current catalogs are those dated for the year in which a student's degree is conferred and for the four preceding years.

A student who, after an extended absence, desires to complete graduation requirements under a catalog which was in effect while the student was in residence at JBU is subject to the following:

1. The student must meet the requirements in the major field as listed in a current catalog, completing in the five years prior to graduation a minimum of six semester hours in the major field (as approved by the major department).
2. If general education requirements were completed under the older catalog, the general education requirements of a current catalog are considered met. In areas (biblical studies, social sciences, natural science,



etc.) where not all general education requirements were completed, current catalog requirements must be met.

3. A student completing one of the teacher education curricula must meet Arkansas certification requirements in effect at the time of graduation.
4. All provisions of the residence requirement must be met.

### **Fresh Start Policy**

The student who re-enrolls in the university after an absence of seven or more years and successfully completes a full-time semester may petition the Academic Dean for a “Fresh Start.” If the petition is approved, the JBU grade point average used as basis for good academic standing, financial aid eligibility, and minimum JBU grade point average for graduation will exclude all credits earned prior to the absence. In effect, the Fresh Start treats early JBU work as transfer work. Of all courses earned in the first period of attendance, only those with grades of ‘A,’ ‘B,’ ‘C,’ or ‘S’ may be counted toward the degree.

## **REQUIREMENTS FOR THE ASSOCIATE’S DEGREE**

Every program requires at least 62 semester hours of credit, and it should be possible to complete any of the degrees in four semesters. Each two-year degree program carries general education requirements, requirements specified by the department, and residence requirements. The final responsibility for meeting all degree requirements rests with the student.

### **General Education Requirements for the Associate’s Degree**

The following courses in the university Core Curriculum must be completed by all students pursuing associate’s degrees:

1. Lower-level Core Classes—19 hours
  - BBL 1013 Old Testament Survey
  - BBL 1023 New Testament Survey
  - COR 1002 Gateway Seminar in Christian Scholarship
  - COR 1012 Wellness
  - EGL 1013 English I: Composition
  - EGL 1023 English II: Literary Analysis and Research
 One of the following:
  - HST 1013 Western Civilization I
  - HST 1023 Western Civilization II
2. Elective Core Classes—9 hours
  - Mathematics—3 hours
    - BUS 2193 Business Statistics
    - MTH 1003 Quantitative Literacy
    - MTH 1123 Survey of Calculus
    - MTH 1134 Calculus I

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|                         |      |   |
|-------------------------|------|---|
| MTH                     | 2103 | Statistics with Computer Applications                     |
| PSY                     | 2383 | Introductory Statistics                                   |
| Social Science—3 hours  |      |   |
| BUS                     | 4133 | Selected Topics: Economics and Society of Central America |
| ECN                     | 2003 | Basic Economics   |
| ED                      | 2133 | Educational Psychology                                    |
| FAM                     | 2123 | Psychology of Relationship Development                    |
| PSY                     | 1013 | Introductory Psychology                                   |
| Natural Science—3 hours |      |   |
| BIO                     | 1003 | Biological Science  |
| BIO                     | 1124 | Cell Biology  |
| BIO                     | 2134 | Animal Biology  |
| CHM                     | 1014 | Fundamentals of Chemistry                                 |
| CHM                     | 1124 | General Chemistry I                                       |
| GSC                     | 1023 | Physical Science  |
| PHY                     | 1114 | Fundamentals of Physics I                                 |
| PHY                     | 2114 | General Physics I   |

### **Residence Requirements**

Students in associate's degree programs must complete two or more full-time semesters at John Brown University. At least 18 of the last 24 hours presented in fulfillment of degree requirements must be taken in residence. At least two courses totaling four credit hours in the major field or emphasis must be taken at John Brown University.

### **Correspondence and Extension Work**

A maximum of 15 hours of credit may be allowed for extension work, including examinations for the establishment of credit. (See page 75 for details on validating such work.)

### **Grade Point Average**

The grade point average must be at least 2.0 in work presented for an associate's degree, and at least 2.0 in the major subject or emphasis.

### **Maximum Experiential Credits**

A limited number of credits for music ensembles, communications practicums, and guided field experience may be counted in the minimum hours for an associate's degree. (See regulations on page 76.)

### **Application for Graduation**

An Application for Graduation form, online as part of pre-registration, should be completed when registering for the final semester in residence before completion of degree requirements. This application provides information regarding the graduation fee, exit assessment requirements, and a final check of the student's name as it is to appear on the diploma and in the commencement program.

### **Participation in Commencement Exercises**

Degree candidates may participate in commencement exercises only upon completion of all degree requirements no later than the last day of the semester. Any course work in progress at other institutions must be completed during terms ending no later than one week following JBU commencement. If grades for the transfer work will not be reported at least five weeks prior to commencement, the student must provide to the transferring institution a Commencement Participation Approval form, available in the Registrar's office. The deadline for returning this form is specified on the JBU commencement web site.

### **Requirements for a Second Associate's Degree**

1. Minimum of 90 semester hours.
2. All requirements for both degrees.
3. Six hours taken in residence in second major field.
4. All other provisions of the residence requirements for the first degree.



*DIVISION OF*  
**BIBLICAL STUDIES**

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*DIVISION OF*  
**BIBLICAL STUDIES**

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*Allen, C. Balzer, Blankenship, Brisben (chair), Bruce, Castleman,  
R. Habermas, G. Johnson, Kidd, Klotz, D. Lambert, Lanker, Ogle, Reed, Vila*

**T**he mission of the Biblical Studies Division to the JBU community is three-fold:

1) To equip each student to be biblically literate, historically rooted, theologically reflective, doctrinally sound, and maturing in Christ-like formation in all relationships for the glory of God. This aspect of the mission is accomplished primarily by offering 14 hours of course work in the Core Curriculum—

Old Testament Survey  
New Testament Survey  
Evangelical Theology  
Introduction to Philosophy  
Capstone Seminar in Christian Life

2) To equip specifically for vocational service those students who have chosen one of the major courses of study offered by the division.

3) To prepare students for seminary or graduate studies in fields related to their areas of study.

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**DEPARTMENT OF BIBLE, RELIGION, AND PHILOSOPHY**  
(SYMBOLS: BBL, RPH)

**K**nowledge of the Bible is essential for effective Christian living as well as for any type of Christian work, whether one plans to attend graduate school or enter directly into ministry. The department seeks to help each student examine the scriptural basis for the faith and to guide the student in the use of basic tools for grasping the content and application of God's Word. Students are encouraged to think carefully and be intellectually honest while affirming the place of sincere Christian faith in the pursuit of truth. The Department of Bible, Religion, and Philosophy offers a major and a minor in Biblical and Theological Studies and minors in Church Leadership, New Testament Greek, and Religion and Philosophy.

## Requirements for the Bachelor of Arts (B.A.) degree with major in Biblical and Theological Studies

The major in Biblical and Theological Studies is designed to equip those who are planning to enter directly into ministry or further their studies in seminary or graduate school. The curriculum provides important content in biblical studies, theology, church history, and related disciplines. Majors in Biblical and Theological Studies must successfully complete 12 hours of language studies, including at least two semesters of New Testament Greek.

1. University Core Curriculum—55 hours. (See page 69.)
  2. Courses Specified by this Division—9 hours
    - BBL 34\_3 A New Testament book study
    - CMN 1213 Christian Leadership and Service
    - RPH 3323 Philosophy of the Christian Faith
  3. Required Major Field Courses—39 hours
    - BBL 2513 Elementary New Testament Greek I
    - BBL 2523 Elementary New Testament Greek II
    - BBL 3513 Syntax of New Testament Greek I\*
    - BBL 3523 Syntax of New Testament Greek II\*
    - \* A 6-hour sequence in Latin, French, or German may replace BBL 3513 and 3523
    - BBL 3363 History of the Christian Church I
    - BBL 3373 History of the Christian Church II
    - BBL 34\_3 A New Testament book study
    - BBL 36\_3 An Old Testament book study
    - BBL 36\_3 An Old Testament book study
    - BBL 4473 Seminar in Biblical Studies
    - BBL 4493 Seminar in Theological Studies
    - RPH 4423 Ethics
    - RPH 4433 Christian Apologetics
  4. Electives as necessary to complete minimum semester hours
- Minimum total semester hours . . . . .124

## Requirements for minor in Biblical and Theological Studies

The student must successfully complete a minimum of 21 hours beyond the Core.

- Required Courses—15 hours
- BBL 3363 History of the Christian Church I
  - BBL 3373 History of the Christian Church II
  - BBL 34\_3 A New Testament Book Study
  - BBL 36\_3 An Old Testament Book Study
- One of the following:
- BBL 4473 Seminar in Biblical Studies



BBL 4493 Seminar in Theological Studies

An additional six hours from among BBL or RPH courses.

### **Requirements for minor in Church Leadership**

The student must successfully complete a minimum of 18 hours.

Required Courses—18 hours

- BBL 3223 Communicating the Christian Message
- BBL 3353 Theology of Worship
- CMN 2263 Discipleship and Evangelism
- CMN 4613 Internship in Christian Ministry
- RPH 3323 Philosophy of the Christian Faith
- RPH 4433 Christian Apologetics

### **Requirements for minor in New Testament Greek**

The student must successfully complete a minimum of 21 hours.

Required Courses—15 hours

- BBL 2513 Elementary New Testament Greek I
  - BBL 2523 Elementary New Testament Greek II
  - BBL 3513 Syntax of New Testament Greek I
  - BBL 3523 Syntax of New Testament Greek II
  - LS 3173 Introduction to Linguistics
- Six hours from the following:
- BBL 4512 Greek Readings and Exegesis
  - BBL 4581/82/83 Selected Topics: New Testament Greek

### **Requirements for minor in Religion and Philosophy**

The student must successfully complete a minimum of 21 hours beyond the Core.

Required Courses—15 hours

- RPH 3323 Philosophy of the Christian Faith
  - RPH 3333 History of Philosophy
  - RPH 4423 Ethics
  - RPH 4433 Christian Apologetics
- One of the following:
- RPH 3533 Introduction to Islam
  - RPH 3543 Introduction to Hinduism and Buddhism

An additional six hours from among BBL or RPH courses.

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## **DEPARTMENT OF CHRISTIAN MINISTRY**

(SYMBOL: CMN)

The Department of Christian Ministry seeks to equip students with biblical and professional knowledge and practical skills for service and

ministry, as well as for graduate study in the field of Christian leadership, formation, and evaluation. The department's intent is to develop graduates who are qualified to work with children, youth, and families in a variety of domestic and international venues such as churches, social service agencies, inner city ministries, camp and recreation settings, and parachurch organizations.

## **Requirements for the Bachelor of Science (B.S.) degree with major in Child and Family Studies**

Students who major in Child and Family Studies will be prepared to work with children and families in a wide variety of settings: social service agencies, international benevolent organizations, Christian care facilities for abused or special needs children, foster care group settings, and mission settings, as well as parachurch organizations and churches. Offering holistic care and support—emotional, social, physical, and spiritual support—for children and families is the primary focus of this major.

1. University Core Curriculum—55 hours. (See page 69.)
2. Courses Specified by this Division—9 hours
  - BBL 34\_3 A New Testament book study
  - CMN 1213 Christian Leadership and Service
  - RPH 3323 Philosophy of the Christian Faith
3. Required Major Field Courses—38 hours
  - BBL 36\_3 An Old Testament book study
  - CMN 2303 Creating Holistic Curriculum for Children in Crisis
  - CMN 3273 Critical Concerns with Children
  - CMN 3453 Nurturing Spiritual Development in Children
  - CMN 4221 Introduction to Senior Seminar
  - CMN 4443 Critical Concerns with Adolescents
  - CMN 4463 Senior Seminar
  - CMN 4493 Ministering to Families across the Life Span
  - FAM 2133 Introduction to Family Science
  - FAM 3133 Marriage and Family Living
  - FAM 3223 Principles of Effective Parenting
  - Internship—4 hours from CMN 4611, 4612, or 4614
  - One of the following:
    - FAM 3243 Family Sexuality
    - FAM 4253 Family Communication
4. Minor in another ministry or theological area, or other approved field\*
5. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . .124

\* The CFS major with a minor in FHS will qualify the student for CFLE Certification (ECN 2003 must be taken as the Social Science option to meet CFLE requirements).

## Requirements for minor in Child and Family Studies

The student must successfully complete a minimum of 18 hours.

Required Courses—18 hours

|          |   |
|----------|---|
| BBL 34_3 | A New Testament book study                          |
| CMN 1213 | Christian Leadership and Service                    |
| CMN 2303 | Creating Holistic Curriculum for Children in Crisis |
| CMN 3273 | Critical Concerns with Children                     |
| CMN 3453 | Nurturing Spiritual Development in Children         |
| FAM 2133 | Introduction to Family Science                      |

## Requirements for the Bachelor of Science (B.S.) degree with major in Outdoor Leadership Ministries

The major in Outdoor Leadership Ministries is designed to produce outdoor ministry educators and leaders equipped with sound judgment, appropriate technical ability, and effective teaching and facilitation competencies to create safe outdoor learning environments in which to nurture spiritual formation. Ministry opportunities include both national and international settings as camp program directors, wilderness guides and instructors, experiential learning and challenge course facilitators, outdoor educators, conference and retreat programmers, and leaders for children-, youth-, and family-serving organizations such as YMCA, Campfire, Scouting, and Young Life. Opportunities to earn certifications in Wilderness First Responder, Leave No Trace, Outdoor Leadership, and Outdoor Education are incorporated into the curriculum.

1. University Core Curriculum—55 hours. (See page 69.)
2. Courses Specified by this Division—9 hours
 

|          |                                   |
|----------|-----------------------------------|
| BBL 34_3 | A New Testament book study        |
| CMN 1213 | Christian Leadership and Service  |
| RPH 3323 | Philosophy of the Christian Faith |
3. Required Major Field Courses—39 hours
 

|          |   |
|----------|---|
| CMN 1632 | WILD Adventure Program                          |
| CMN 2223 | Challenge Course Programs and Management        |
| CMN 2373 | Principles and Practices of Adventure Education |
| CMN 2383 | Outdoor Living Skills                           |
| CMN 3153 | Philosophy and Methods of Outdoor Education     |
| CMN 3213 | Camp Leadership and Management                  |
| CMN 3263 | Discipleship Development and Outdoor Ministry   |
| CMN 3690 | Practicum: Outdoor Pursuits Instruction         |
| CMN 4113 | Wilderness First Responder                      |
| CMN 4163 | Senior Seminar in Outdoor Leadership Ministries |
| CMN 4534 | Expedition Leadership                           |

 Internship—3 hours from CMN 4651, 4652, or 4653

One of the following:

- CMN 2263 Discipleship and Evangelism
- CMN 2313 Christian Education with Adolescents
- CMN 3253 Foundations and Practice of Children’s Ministry
- CMN 3453 Nurturing Spiritual Development in Children
- CMN 4493 Ministering to Families across the Life Span

One of the following:

- CMN 3313 Foundations and Practice of Youth Ministry
- CMN 4443 Critical Concerns with Adolescents
- MGT 2173 Principles of Management
- PSY 2413 Developmental Psychology
- PSY 3423 Social Psychology

4. Minor field or electives as necessary to complete minimum semester hours  
Minimum total semester hours . . . . .124

### **Requirements for minor in Outdoor Leadership Ministries**

The student must successfully complete a minimum of 21 hours beyond the Core.

Required Courses—21 hours

- CMN 1213 Christian Leadership and Service
- CMN 1632 WILD Adventure Program
- CMN 2223 Challenge Course Programs and Management
- CMN 2373 Principles and Practices of Adventure Education
- CMN 2383 Outdoor Living Skills
- CMN 3213 Camp Leadership and Management
- CMN 3263 Discipleship Development and Outdoor Ministry
- CMN 4651 Internship in Outdoor Leadership Ministries

### **Requirements for the Bachelor of Science (B.S.) degree with major in Youth Ministries**

The Youth Ministries major is specifically designed for those students who are preparing for vocational youth ministry in church or parachurch settings. Students are exposed to a broad range of topics and are given the opportunity to acquire and develop skills directly related to ministry with the contemporary youth culture.

1. University Core Curriculum—55 hours. (See page 69.)
2. Courses Specified by this Division—9 hours
  - BBL 34\_3 A New Testament book study
  - CMN 1213 Christian Leadership and Service
  - RPH 3323 Philosophy of the Christian Faith

3. Required Major Field Courses—39 hours
    - CMN 2263 Discipleship and Evangelism
    - CMN 2313 Christian Education with Adolescents
    - CMN 3313 Foundations and Practice of Youth Ministry
    - CMN 3323 Youth Ministry Organization and Planning
    - CMN 3463 Youth Culture
    - CMN 4433 Senior Seminar in Youth Ministry
    - CMN 4443 Critical Concerns with Adolescents
    - CMN 4619 Internship in Youth Ministry
    - FAM 2133 Introduction to Family Science
    - CMN \_\_\_3 Child and Family Studies elective
    - CMN \_\_\_3 Outdoor Leadership Ministry elective
  4. Minor in Biblical and Theological Studies or other approved field
  5. Electives as necessary to complete minimum semester hours
- Minimum total semester hours . . . . .124

### **Requirements for minor in Youth Ministries**

The student must successfully complete a minimum of 20 hours beyond the Core.

Required Courses—20 hours

- CMN 1213 Christian Leadership and Service
- CMN 2313 Christian Education with Adolescents
- CMN 3313 Foundations and Practice of Youth Ministry
- CMN 3323 Youth Ministry Organization and Planning
- CMN 3463 Youth Culture
- CMN 4443 Critical Concerns with Adolescents
- CMN 4612 Internship in Christian Ministries

### **Requirements for Bachelor of Science (B.S.) degree with major in Youth and Worship Ministries**

The Youth and Worship Ministries degree incorporates a focus on worship with a call to minister to teenagers. Graduates of the program will be prepared to serve in a variety of settings where these dual gifts may be applied.

1. University Core Curriculum—55 hours. (See page 69.)
2. Courses Specified by this Division—9 hours
  - BBL 34\_3 A New Testament book study
  - CMN 1213 Christian Leadership and Service
  - RPH 3323 Philosophy of the Christian Faith
3. Worship Ministry Core—18 hours
  - MUS 1111 Musicianship I
  - MUS 1113 Theory I

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- MUS 2503 Worship Ministry I: Orientation
- MUS 2513 Worship Ministry II: Materials and Methods
- MUS 3563 Audio Technology I
- MUS 51/61/81 Applied/Class Voice (2 hours)
- MUS 31/41/91 Applied/Class Piano (2 hours)

One of the following:

- MUS 3101 Survey of Instruments
- MUS 3411 Conducting I

4. Ministry Core—18 hours

- BBL 3223 Communicating the Christian Message
- BBL 3363 History of the Christian Church I
- BBL 3373 History of the Christian Church II
- BBL 36\_3 An Old Testament book study
- CMN 2263 Discipleship and Evangelism
- CMN 4433 Senior Seminar in Youth Ministry

5. Youth Ministry Core—24 hours

- CMN 2313 Christian Education with Adolescents
- CMN 3313 Foundations and Practice of Youth Ministry
- CMN 3323 Youth Ministry Organization and Planning
- CMN 3463 Youth Culture
- CMN 4443 Critical Concerns with Adolescents
- CMN 4619 Internship in Youth Ministry

6. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . .125

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## DEPARTMENT OF FAMILY AND HUMAN SERVICES

(SYMBOL: FAM)

The diaconal service of caring for widows, orphans, and the poor has historically been a ministry of the Church. The Department of Family and Human Services seeks to better equip for this service by offering a bachelor's program in Family and Human Services and a minor in Family and Human Services. This innovative curriculum, which follows the course guidelines of the National Council for Family Relations, incorporates Family Studies courses with course work from other departments to provide the student with theological, theoretical, and practical training. Students who have earned the degree in Family and Human Services serve in a variety of capacities such as family educators, family caseworkers, social workers, youth counselors, mental health technicians, dispute mediators, foster care caseworkers, and adoption and placement counselors. The degree in Family and Human Services provides an excellent foundation for graduate programs in marriage and family therapy, professional counseling, social work, and other related fields.

## Requirements for the Bachelor of Science (B.S.) degree with major in Family and Human Services

1. University Core Curriculum—55 hours. (See page 69.)  
     Social Science component must be ECN 2003.  
     Mathematics component must be PSY 2383.
2. Courses Specified by this Division—6 hours  
     CMN 1213 Christian Leadership and Service  
     RPH 3323 Philosophy of the Christian Faith
3. Required Major Field Courses—41 hours  
     FAM 2133 Introduction to Family Science  
     FAM 2413 Developmental Psychology  
     FAM 3133 Marriage and Family Living  
     FAM 3223 Principles of Effective Parenting  
     FAM 3243 Family Sexuality  
     FAM 4221 Introduction to Senior Seminar  
     FAM 4253 Family Communication  
     FAM 4433 Senior Seminar  
     FAM 4443 Critical Concerns with Adolescents  
     FAM 4453 Family Law and Society  
     ICS 4113 Intercultural Family Seminar  
     PSY 1013 Introduction to Psychology  
     RPH 4423 Ethics  
     Internship—4 hours from FAM 4611, 4612, or 4614
4. Minor in an approved field, or 9 unique hours from each of any two of the following concentrations.
  - A. Child and Family Studies  
     BBL 34\_3 A New Testament book study  
     CMN 2303 Creating Holistic Curriculum for Children in Crisis  
     CMN 3273 Critical Concerns with Children  
     CMN 3453 Nurturing Spiritual Development in Children
  - B. Child and Adolescent Development  
     CMN 3273 Critical Concerns with Children  
     CMN 3453 Nurturing Spiritual Development in Children  
     CMN 3463 Youth Culture  
     PSY 2203 Theories of Personality
  - C. Psychology  
     PSY 2233 Theories of Counseling  
     PSY 2393 Research Methods  
     PSY 3423 Social Psychology  
     PSY 4213 Abnormal Psychology
  - D. Wilderness Counseling  
     CMN 2223 Challenge Course Programs and Management  
     CMN 2373 Principles and Practices of Adventure Education



- CMN 4534 Expedition Leadership
- PSY 2233 Theories of Counseling

E. Pre-Counseling

- CMN 4493 Ministering to Families across the Life Span
- ICS 2113 Intercultural Communications
- PSY 2233 Theories of Counseling
- PSY 2243 Introduction to Therapeutic Interviewing

F. Criminology

- POL 3133 Politics of Social Policy
- POL 4313 Christianity and the Legal Profession
- PSY 4213 Abnormal Psychology
- SST 1113 Introduction to Sociology

G. Social Justice

- HST 2323 Poverty and Welfare in American History
- POL 3133 Politics of Social Policy
- POL 3213 Faith and Politics
- RPH 4423 Ethics

6. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . .124

### Requirements for minor in Family and Human Services

The student must successfully complete a minimum of 18 hours.

Required Courses—15 hours

- FAM 2133 Introduction to Family Science
- FAM 3133 Marriage and Family Living
- FAM 3243 Family Sexuality
- FAM 4253 Family Communication
- RPH 4423 Ethics

An additional three hours of approved electives from FAM, or PSY 2383.

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## DEPARTMENT OF INTERCULTURAL STUDIES

(SYMBOL: ICS)

The Intercultural Studies Program is designed for students focusing on cross-cultural careers in missions, translation, community development, international business, and the teaching of English as a second language.

The B.A. in Intercultural Studies (ICS) requires a minor field, and students are encouraged to diversify their academic experience by adding a minor that enhances the ICS degree, in keeping with their vocational goals. For example, ICS majors might choose the TESOL minor if they want to teach English in an international setting.



## Requirements for the Bachelor of Arts (B.A.) degree with major in Intercultural Studies

1. University Core Curriculum—52 hours. (See page 69.)  
The Global Studies elective is covered by program requirements.
2. Courses Specified by this Division—9 hours
  - BBL 34\_3 A New Testament book study
  - CMN 1213 Christian Leadership and Service
  - RPH 3323 Philosophy of the Christian Faith
3. Intercultural Studies Core—15 hours
  - CMN 4613 Internship in Christian Ministry
  - ICS 2113 Intercultural Communications
  - ICS 4183 Cultural Values Seminar
  - SST 2123 Cultural Anthropology

One of the following:

  - RPH 3533 Introduction to Islam
  - RPH 3543 Introduction to Hinduism and Buddhism
4. One of the following Concentrations—12 hours
  - A. Cultural Leadership
    - ICS 3133 Cultural Research Methods
    - ICS 4133 Intercultural Leadership Skills
    - POL 3353 International Relations
    - SST 1143 World Regional Geography
  - B. Intercultural Ministries
    - CMN 2263 Discipleship and Evangelism
    - RPH 4433 Christian Apologetics

One of the following:

    - BBL 3303 Theology of Missions
    - BBL 3583 Perspectives on the World Christian Movement

One of the following:

    - ICS 3243 Principles and Philosophy of Community Development
    - ICS 4133 Intercultural Leadership Skills
  - C. Community Development
    - ICS 3133 Cultural Research Methods
    - ICS 3243 Principles and Philosophy of Community Development
    - ICS 3263 Theory and Practice of Appropriate Technology I
    - ICS 3283 Theory and Practice of Appropriate Technology II
5. Modern Foreign Language—12 hours  
With approval of the ICS advisor and division chair, students may substitute courses in New Testament Greek or Biblical Hebrew for Modern Foreign Language, and LS 3173 may substitute for three hours of language.

6. Minor Field in TESOL, Linguistics, or other approved field  
The 21 hours below meet John Brown University's specifications for a TESOL minor, but do not meet state requirements for public school licensure. It is recommended that the courses be taken in the order in which they are listed here.

- ICS 2113 Intercultural Communications
- ED 2133 Educational Psychology
- LS 3173 Introduction to Linguistics
- EGL 3363 Advanced English Grammar
- ED 3563 Second Language Acquisition for Teachers
- ED 3583 Curriculum and Instruction: TESOL (Prerequisite: ED 2133)
- ED 3183 Educational Assessment

7. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . .124

### **Requirements for minor in Intercultural Studies**

The student must successfully complete a minimum of 21 hours.

Required Courses—6 hours

One of the following:

- ICS 2113 Intercultural Communications
- SST 2123 Cultural Anthropology

One of the following:

- BBL 34\_3 A New Testament book study
- BBL 36\_3 An Old Testament book study

An additional 15 hours of CMN, ICS, or RPH courses selected in accordance with the student's vocational goals.

At least six hours must be upper-division courses.

*DIVISION OF*  
**BUSINESS**

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## DIVISION OF BUSINESS

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*Balla, Butts, Kennelley, McCullough (chair), M. Moore, Rothfuss, Thoma, Timmons, Togami, Walenciak*

John Brown University's basic mission is to provide Christ-centered education that prepares people to honor God and serve others by developing their intellectual, spiritual, and professional lives. Building upon this foundation, the Division of Business accepts the following as its own unique mission within the university: To advance the Kingdom by developing leaders of competence, character, and conscience through student-centered educational programs in Business.

Accordingly, the division seeks to provide an educational experience for its majors, characterized by

- \* *the integration of faith with the learning process*
- \* *a respect for the worth of the individual who is a unique product of God's creative power, endowed with unique gifts and abilities*
- \* *an up-to-date curriculum addressing a body of knowledge vital to one's personal success in life as well as the ability to function effectively in an organizational context*
- \* *a focus on the ability to process knowledge, to think analytically and logically to reach workable conclusions consistent with scriptural truth*
- \* *an emphasis on people skills, recognizing that organizational success is dependent as much upon social interaction as it is upon one's knowledge*
- \* *the philosophy that the "bottom line" is measured not in dollars or material wealth, but in terms of the Christian concept of stewardship, that our money is to be our servant rather than our ruler, and that only what we do for Christ has eternal value.*

### DEGREE PROGRAMS

The Division of Business offers six undergraduate degree programs in a traditional format leading to the Bachelor of Science (B.S.) and to the Bachelor of Arts (B.A.): Accounting, Business Administration, International Business, Management, Marketing, and Sport Management. Students may also choose the following areas as minor fields of study: Accounting, Business Administration, Economics, International Business, Leadership Studies, Management, Marketing, Professional Accounting Development, and Sport Management. The Division of Business also partners with Graduate and Professional Studies to offer the Organizational Management degree program in a nontraditional format for working adults leading to the Bachelor of Science (B.S.).

This program is described in the Graduate and Professional Studies Catalog and on the web site <http://www.jbu.edu/advance/degrees/index.asp>. Finally, the Division of Business offers the Master of Science in Leadership and Ethics (MSLE) degree and the Master of Business Administration (MBA) degree. See <http://www.jbu.edu/grad/degrees.asp> for degree specifications.

All degree programs of the Division of Business are accredited by the International Assembly for Collegiate Business Education (IACBE), <http://www.iacbe.org>, phone (913)631-3009.

## GRADUATION REQUIREMENTS FOR BACCALAUREATE DEGREES

### Outcomes Assessment

As a condition for graduation, students in all baccalaureate programs within the Division of Business are required to take the Major Field Test in Business during their final year.

### Divisional GPA

Students must achieve a cumulative grade point average of 2.25 in all Business Division course work and in each minor.

## PREPARATION FOR THE MBA DEGREE

The degree programs of the Division of Business are excellent preparation for the MBA degree at John Brown University. Students planning to enter graduate studies at another university should check the specific prerequisite requirements of that program.

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## DEPARTMENT OF ACCOUNTING

(SYMBOL: ATG)

The Accounting degree helps students develop analytical and problem solving skills within the financial context of a business. Such skills provide a foundation for students who seek additional studies leading to practice as a professional accountant. This degree can also help equip students in other careers which require analytical skills, such as law, FBI or IRS services, and not-for-profit and mission organizations.

Accounting minor—An accounting minor will be extremely valuable to students with any other business degree. Students majoring in areas outside the business field may find the accounting minor to be a marketable addition to their plan of study.

Professional Accounting Development minor—Students interested in practicing as a professional accountant are strongly encouraged to declare the Professional Accounting Development minor. This minor is appropriate for those who desire to practice as a Certified Internal Auditor (CIA), a Certified Management Accountant (CMA), or a Certified Public Accountant (CPA). Since the requirements for the CPA exam vary from state to state, students wishing to take this exam should consult with the State Board of Accountancy where the exam will be taken. Most states require 150 semester hours and some require a year or two of experience. The Professional Accounting Development minor is flexible to help students meet the requirements of various states.

The baccalaureate program in Accounting requires 124 minimum total semester hours including courses from three categories: 1) Core Curriculum, 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

### **Requirements for the Bachelor of Science (B.S.) degree with major in Accounting**

1. University Core Curriculum—49 hours. (See page 69.)  
Mathematics and Social Science electives are covered by program requirements.
2. Required Major Field Courses—54 hours
  - ATG 2173 Principles of Financial Accounting
  - ATG 2183 Principles of Managerial Accounting
  - ATG 3103 Intermediate Accounting I
  - ATG 3113 Intermediate Accounting II
  - ATG 3993 Accounting Internship
  - BUS 2113 Financial Spreadsheet Applications
  - BUS 2153 Financial Mathematics
  - BUS 2193 Business Statistics
  - BUS 3153 Applied Business Ethics
  - BUS 4143 Business Law
  - BUS 4173 Business Finance
  - BUS 4993 Strategic Management
  - ECN 2113 Principles of Microeconomics
  - ECN 2123 Principles of Macroeconomics
  - MGT 2173 Principles of Management

Three courses from among the following, as advised:

  - ATG 3153 Federal Income Tax Basics
  - ATG 3163 Advanced Federal Income Tax Topics
  - ATG 3173 Cost Accounting
  - ATG 3183 Government and Not-For-Profit Accounting
  - ATG 4153 Auditing and Attestation Services
  - ATG 4163 Advanced Accounting

- 3. Minor field or electives as necessary to complete minimum total hours  
Minimum total semester hours . . . . .124

**Requirements for minor in Accounting**

The student (non-Accounting majors) must successfully complete a minimum of 21 hours.

Required Courses—15 hours

- ATG 2173 Principles of Financial Accounting
- ATG 2183 Principles of Managerial Accounting
- ATG 3103 Intermediate Accounting I
- ATG 3113 Intermediate Accounting II
- BUS 2113 Financial Spreadsheet Applications

An additional six additional hours of electives from ATG.

**Requirements for minor in Professional Accounting Development (Accounting majors only)**

The student must successfully complete a minimum of 21 hours.

A minimum of nine hours selected from:

- ATG 3153 Federal Income Tax Basics
- ATG 3163 Advanced Federal Income Tax Topics
- ATG 3173 Cost Accounting
- ATG 3183 Government and Not-for-Profit Accounting
- ATG 4153 Auditing and Attestation Services
- ATG 4163 Advanced Accounting

An additional 12 hours from the Division of Business.

Students are encouraged to select courses that will satisfy CPA exam requirements in the state where licensure will be sought.

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**DEPARTMENT OF BUSINESS ADMINISTRATION**  
(SYMBOL: BUS)

The Business Administration degree is a versatile program appropriate for those who wish to operate their own business, enter the field of business as an employee of an existing firm, pursue a masters or law degree, or serve in church or nonprofit administration. Business Administration majors find themselves positioned for careers in various areas, or may choose to specialize by combining their major with a technical minor field of study, such as Digital Media Arts or Graphic and Web Design. Students may also choose Business Administration as a minor field of study.



The baccalaureate program in Business Administration requires 124 minimum total semester hours including courses from three categories: 1) the Core Curriculum, 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

**Requirements for the Bachelor of Science (B.S.) degree with major in Business Administration**

1. University Core Curriculum—49 hours. (See page 69.)  
 Mathematics and Social Science electives are covered by program requirements.
2. Required Major Field Courses—54 hours
  - ATG 2173 Principles of Financial Accounting
  - ATG 2183 Principles of Managerial Accounting
  - BUS 1123 Business Communication
  - BUS 2153 Financial Mathematics
  - BUS 2193 Business Statistics
  - BUS 3153 Applied Business Ethics
  - BUS 3993 Internship
  - BUS 4143 Business Law
  - BUS 4173 Business Finance
  - BUS 4993 Strategic Management
  - ECN 2113 Principles of Microeconomics
  - ECN 2123 Principles of Macroeconomics
  - ECN 3133 Money and Banking
  - ECN 4103 International Economics
  - MGT 2173 Principles of Management
  - MKT 3143 Principles of Marketing
  - MTH 1113 College Algebra (or equivalent)
 One of the following:
  - BUS 2113 Financial Spreadsheet Applications
  - BUS 3123 Developing Applications with Access
3. Minor field or electives as necessary to complete minimum total hours  
 Minimum total semester hours . . . . .124

**Requirements for minor in Business Administration**

The student must successfully complete a minimum of 21 hours.

- Required Courses—6 hours
- ECN 2113 Principles of Microeconomics
- One of the following
- ATG 1163 Accounting for Decision Making
  - ATG 2173 Principles of Financial Accounting

An additional nine hours selected from BUS, excluding 4993.

A minimum of six additional hours from the division.

At least six hours must be upper -division courses.

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## DEPARTMENT OF ECONOMICS

(SYMBOL: ECN)

**E**conomics is the social science of human choice. From individual lives to entire countries, our choices direct and determine our future. The general purpose of the Department of Economics at John Brown University is to acquaint students with the economic processes of modern societies, to provide them with a Christian perspective and framework to approach contemporary economic issues and problems, and to foster an ability to exercise good judgment with regard to societal issues. Students may choose Economics as a minor field of study.

### Requirements for minor in Economics

The student must successfully complete a minimum of 21 hours.

Required Courses—9 hours

ECN 2113 Principles of Microeconomics

ECN 2123 Principles of Macroeconomics

ECN 4993 Senior Research Project

An additional 12 hours of electives from ECN.

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## DEPARTMENT OF INTERNATIONAL BUSINESS

(SYMBOL: INT)

**T**he International Business degree is a broad program of administrative and international studies designed to prepare students to function competently in international and multicultural business contexts. In addition to the campus curriculum, students have the opportunity to participate in overseas study and international internships. This program is enhanced by JBU's rich tradition of international student diversity.

The Bachelor of Arts or Bachelor of Science degrees with major in International Business requires 124 minimum total semester hours including courses from three categories: 1) the Core Curriculum, 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

International Business may also be selected as a minor field of study.

**Requirements for the Bachelor of Arts (B.A.) degree or Bachelor of Science (B.S.) degree with major in International Business**

1. University Core Curriculum—46 hours. (See page 69.)  
 Mathematics, Social Science, and Global Studies electives are covered by program requirements.
2. Required Major Field Courses—57 hours
  - ATG 2173 Principles of Financial Accounting
  - ATG 2183 Principles of Managerial Accounting
  - BUS 2193 Business Statistics
  - BUS 3153 Applied Business Ethics
  - BUS 3993 Internship
  - BUS 4143 Business Law
  - BUS 4993 Strategic Management
  - ECN 2113 Principles of Microeconomics
  - ECN 2123 Principles of Macroeconomics
  - INT 3173 International Finance
 Foreign Language—12 hours, including three at intermediate level  
 One of the following:
  - BUS 2113 Financial Spreadsheet Applications
  - BUS 3123 Developing Applications with Access
 One of the following:
  - ECN 4103 International Economics
  - INT 3113 European Trade
 One of the following:
  - INT 2113 European Business Practices
  - INT 2183 International Management
 One of the following:
  - INT 3153 International Marketing
  - INT 4113 Marketing Research
 One of the following:
  - BBL 3583 Perspectives on the World Christian Movement
  - ICS \_\_\_3 As advised
3. Minor field or electives as necessary to complete minimum total hours  
 Minimum total semester hours . . . . .124

**Requirements for minor in International Business**

The student must successfully complete a minimum of 21 hours.

- Required Courses—6 hours
- ECN 2113 Principles of Microeconomics

One of the following:

- ATG 1163 Accounting for Decision Making
- ATG 2173 Principles of Financial Accounting

An additional nine hours of INT courses. A minimum of six additional hours from BUS, ECN, or INT.

At least six hours must be upper-division courses.

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## DEPARTMENT OF LEADERSHIP STUDIES

(SYMBOL: LDR)

The Christian community is uniquely positioned to address the need for leadership in the world today. The Division of Business offers a Leadership Studies minor available and applicable to a wide variety of majors at John Brown University. It is designed to be cross-disciplinary in its approach, well-grounded in academic thought, and practical in its application.

The Leadership Studies Advisory Council, comprising faculty from a variety of academic arenas and professionals from the Soderquist Center for Leadership and Ethics, advises and provides direction for this effort.

The Leadership Studies minor offers courses organized for maximum student benefit and flexibility covering the discipline of leadership at its core, its competencies, and in its specific academic and professional contexts.

### Requirements for minor in Leadership Studies

The student must successfully complete a minimum of 19 hours.

Required Courses—13 hours

- LDR 2551 Service Learning
- LDR 2553 Leadership Theory and Practice
- LDR 3553 Leadership Competencies
- LDR 3563 Organizational Leadership

One of the following:

- HST 3423\* Leaders in History
- POL 3143\* The American Presidency

Six hours from among the following:

- BUS 3153 Applied Business Ethics
- CMN 3213 Camp Leadership and Management
- COM 2121 Practicum in Forensics
- COM 3553 Interpersonal Communication
- EGL 3713 Literary Theory
- ICS 4133 Intercultural Leadership Skills
- LDR 1553 Introduction to Leadership
- LDR 1520-26 Leadership Colloquium
- LDR 2121 Student Leadership

|     |            |  |
|-----|------------|--|
| LDR | 2991/92/93 | Students in Free Enterprise (S.I.F.E.) |
| LDR | 3653       | Leader Scholars Institute Capstone     |
| POL | 3143       | The American Presidency                |
| PSY | 3423       | Social Psychology                      |
| RPH | 4423       | Ethics                                 |

\*If minor requirements are met, this course can count as an elective.

### **Leader Scholars Institute**

The Leader Scholars Institute (LSI) at John Brown University is an interdisciplinary community of leader scholars committed to the academic and applied study of leadership. The program supports participants primarily through reflective and active leadership learning. One of the program's distinctives is the development of a learning community focused around leadership. Students in the Leader Scholars Institute are required to take the following courses; additionally, one credit of Leadership Colloquium is earned for each year of the LSI program successfully completed. LSI students graduate with distinct leadership honors:

|     |            |                                    |
|-----|------------|------------------------------------|
| LDR | 1520-26    | Leadership Colloquium              |
| LDR | 1553       | Introduction to Leadership         |
| LDR | 3651/52/53 | Leader Scholars Institute Capstone |

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## **DEPARTMENT OF MANAGEMENT**

(SYMBOL: MGT)

The Management major prepares students for careers as professional managers in corporations, public institutions, not-for-profit organizations, and small businesses. In addition, the program provides a foundation for students who want to pursue graduate degrees in business and public administration, law, and the social sciences. The curriculum gives students a broad exposure to the functional areas of business, the environments in which organizations must operate, and knowledge of important behavioral dimensions of management. Students may select Management as a major or minor field of study.

The baccalaureate program in Management requires 124 minimum total semester hours including courses from three categories: 1) the Core Curriculum, 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

### **Requirements for the Bachelor of Science (B.S.) degree with major in Management**

1. University Core Curriculum—49 hours. (See page 69.)  
Mathematics and Social Science electives are covered by program requirements.
2. Required Major Field Courses—54 hours
 

|     |      |                                |
|-----|------|--------------------------------|
| ATG | 1163 | Accounting for Decision Making |
| BUS | 1123 | Business Communication         |

- BUS 2153 Financial Mathematics
- BUS 2193 Business Statistics
- BUS 3153 Applied Business Ethics
- BUS 3993 Internship
- BUS 4143 Business Law
- BUS 4173 Business Finance
- BUS 4993 Strategic Management
- ECN 2113 Principles of Microeconomics
- ECN 2123 Principles of Macroeconomics
- ECN 3213 Managerial Economics
- LDR 3563 Organizational Leadership
- MGT 2173 Principles of Management
- MGT 2183 International Management
- MGT 3513 Human Resource Management
- MKT 3143 Principles of Marketing

One of the following:

- BUS 2113 Financial Spreadsheet Applications
- BUS 3123 Developing Applications with Access

3. Minor field or electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

### **Requirements for minor in Management**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ATG 1163 Accounting for Decision Making
- BUS 3153 Applied Business Ethics
- LDR 3563 Organizational Leadership
- MGT 2173 Principles of Management
- MGT 2183 International Management
- MGT 2993 Students in Free Enterprise (S.I.F.E.)
- MGT 3513 Human Resource Management

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## **DEPARTMENT OF MARKETING**

(SYMBOL: MKT)

Northwest Arkansas provides an excellent learning laboratory for the study of contemporary marketing and retailing theory and practice. Marketing students have the opportunity to learn global perspectives and processes from those who are currently leading change in the field. Students may choose Marketing as a major or minor field of study.

The baccalaureate program in Marketing requires 124 minimum total semester hours including courses from three categories: 1) the Core Curriculum,

- 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

**Requirements for the Bachelor of Science (B.S.) degree with major in Marketing**

1. University Core Curriculum—49 hours. (See page 69.)  
 Mathematics and Social Science electives are covered by program requirements.
2. Required Major Field Courses—54 hours
  - ATG 1163 Accounting for Decision Making
  - BUS 2153 Financial Mathematics
  - BUS 2193 Business Statistics
  - BUS 3153 Applied Business Ethics
  - BUS 3993 Internship
  - BUS 4143 Business Law
  - BUS 4173 Business Finance
  - BUS 4993 Strategic Management
  - COM 4323 Advertising
  - ECN 2113 Principles of Microeconomics
  - ECN 2123 Principles of Macroeconomics
  - MKT 3133 Retailing
  - MKT 3143 Principles of Marketing
  - MKT 3153 International Marketing
  - MKT 3163 Consumer Behavior
  - MKT 4113 Marketing Research
  - MKT 4173 Marketing Strategies

One of the following:

  - BUS 2113 Financial Spreadsheet Applications
  - BUS 3123 Developing Applications with Access
3. Minor field or electives as necessary to complete minimum total hours  
 Minimum total semester hours . . . . .124

**Requirements for minor in Marketing**

The student must successfully complete a minimum of 21 hours.

Required Courses—15 hours

- BUS 2193 Business Statistics (or other approved statistics course)
- COM 4323 Advertising
- MKT 3143 Principles of Marketing
- MKT 4113 Marketing Research
- MKT 4173 Marketing Strategies

Two of the following:

- MKT 3133 Retailing
- MKT 3153 International Marketing
- MKT 3163 Consumer Behavior

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## DEPARTMENT OF SPORT MANAGEMENT

The Sport Management program is designed to prepare students with a strong business component to develop the skills applicable to management-level positions in organized sport. Examples of such positions are public relations director (sports information), corporate administrator of sporting events, tournament director, high school athletics director, college athletics director or associate athletics director, business manager for an athletics department, fund-raising administrator, manager of sport facility for collegiate and professional teams, sales representative for sporting goods companies, and marketing director for intercollegiate athletics programs.

The baccalaureate program in Sport Management requires 124 minimum total semester hours including courses from three categories: 1) the Core Curriculum, 2) the required major field courses, and 3) a minor field of study or electives sufficient to achieve the required minimum total hours.

### Requirements for the Bachelor of Science (B.S.) degree with major in Sport Management

1. University Core Curriculum—55 hours. (See page 69.)
  2. Required Major Field Courses—38 hours
    - ATG 1163 Accounting for Decision Making
    - BUS 2333 Introduction to Sport Management and Recreation
    - BUS 2353 Commercial Recreation
    - BUS 3153 Applied Business Ethics
    - BUS 3993 Internship
    - BUS 4353 Sport Law
    - KIN 1381 Field Experience
    - KIN 1481 Field Experience
    - KIN 3353 Theory and Techniques of Coaching
    - MGT 2173 Principles of Management
    - MGT 3323 Management in Health and Sport
    - MGT 3343 Sport Facility Management
    - MKT 3143 Principles of Marketing
- One of the following:
- BUS 2113 Financial Spreadsheet Applications
  - BUS 3123 Developing Applications with Access



3. An additional nine hours of electives from the division, as advised.
  4. Minor field or electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

**Requirements for minor in Sport Management**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ATG 1163 Accounting for Decision Makers
- BUS 2333 Introduction to Sport Management and Recreation
- BUS 2353 Commercial Recreation
- BUS 4353 Sport Law
- MGT 2173 Principles of Management
- MGT 3323 Management in Health and Sport
- MGT 3343 Sport Facility Management



*DIVISION OF*  
**COMMUNICATION**  
and **FINE ARTS**

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*DIVISION OF*  
**COMMUNICATION**  
**and FINE ARTS**

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*Andrus, Armstrong, Beckman, Edwards, Goehner, D. Gould, K. Gould, Holland, Hough, Martin, Peer, Pohle, Rollene, P. Smith, Snediker, Ward, Warner, J. Wubbena, T. Wubbena (chair)*

The Division of Communication and Fine Arts comprises the Departments of Communication, Music, and Visual Arts. Bachelor's degrees are offered in Art and Illustration, Broadcasting, Communication Studies, Digital Media Arts, General Music, Graphic and Web Design, Journalism, Music, Music Education, Photography, Public Relations, and Worship Ministries. Associate degrees are offered in Journalism and Public Relations. Minors are offered in all areas, as well as Performance Studies.

The mission of the Division of Communication and Fine Arts is teaching and nurturing students in their creative, intellectual, spiritual, and professional development.

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**DEPARTMENT OF COMMUNICATION**

(SYMBOL: COM)

The Department of Communication promotes effective communication in the fields of Broadcasting, Communication Studies, Journalism, Performance Studies, and Public Relations. Theoretical and practical approaches are utilized to ensure students are prepared to communicate effectively in an increasingly diverse and global society. Creative Christian leadership is emphasized, preparing students for careers in both religious and secular media and communication fields and for graduate school.

Students in the Department of Communication take a key role in the John Brown University community, including the operation of our on-campus radio station KLRC, television station JBU TV5, student newspaper The Threefold Advocate, student yearbook The Nesher, Pi Kappa Delta speech and debate team, and on-campus Theatre Workshops.

## Requirements for the Bachelor of Science (B.S.) degree with major in Broadcasting

1. University Core Curriculum—55 hours. (See page 69.)
  2. Communication Department Core—15 hours
    - COM 1133 Mass Media and Culture
    - COM 2123 News Writing I
    - COM 2153 News Writing II
    - COM 2523 Public Speaking
    - COM 4293 Communication Law and Ethics
  3. Broadcasting Core—27 hours
    - COM 1101 Beginning Radio Practicum
    - COM 1123 Broadcasting Performance
    - COM 1143 Introduction to Communication Theory
    - COM 1233 Audio Production
    - COM 2101 Intermediate Radio Practicum
    - COM 2423 Broadcast News
    - COM 3101 Advanced Radio Practicum
    - COM 3163 Sales and Promotion
    - COM 3333 Television Production
    - COM 4253 Integrated Media
    - COM 4343 Programming and Management
  4. Supporting Course—3 hours
    - ART 2103 Foundations in Digital Editing
  5. Internship—3 hours
    - COM 4463 Internship in Broadcasting
  6. Minor field or electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

## Requirements for minor in Broadcasting

The student must successfully complete a minimum of 18 hours.

- Required Courses—18 hours
- ART 2103 Foundations in Digital Editing
  - COM 1133 Mass Media and Culture
  - COM 2423 Broadcast News
  - COM 3333 Television Production
  - COM 4293 Communication Law and Ethics
  - COM 4343 Programming and Management

**Requirements for the Bachelor of Arts (B.A.) degree with major in Communication Studies**

1. University Core Curriculum—52 hours. (See page 69.)  
 The Social Science elective must be PSY 1013.  
 Mathematics elective is covered by program requirements.
  2. Communication Department Core—15 hours
    - COM 1133 Mass Media and Culture
    - COM 2123 News Writing I
    - COM 2153 News Writing II
    - COM 2523 Public Speaking
    - COM 4293 Communication Law and Ethics
  3. Communication Studies Core—21 hours
    - COM 1143 Introduction to Communication Theory
    - COM 2133 Visual Media
    - COM 3523 Oral Interpretation
    - COM 3533 Introduction to Rhetorical Theory
    - COM 3553 Interpersonal Communication
    - COM 3563 Argumentation and Debate
    - COM 4223 Electronic-Mediated Communication
  4. Supporting Courses—6 hours
    - PSY 2383 Introductory Statistics
    - One of the following:
      - BUS 1123 Business Communication
      - COM 2121 Practicum in Forensics (3 semesters)
      - COM 3113 Theatre Workshop
      - ICS 2113 Intercultural Communications
      - PSY 2393 Research Methods
  5. Foreign Language—12 hours in one or two languages
  6. Minor field or electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

**Requirements for minor in Communication Studies**

The student must successfully complete a minimum of 18 hours.

- Required Courses—18 hours
- COM 1133 Mass Media and Culture
  - COM 1143 Introduction to Communication Theory
  - COM 2123 News Writing I
  - COM 2523 Public Speaking
  - COM 3553 Interpersonal Communication
  - COM 4293 Communication Law and Ethics

**Requirements for the Bachelor of Science (B.S.) degree with major in Journalism**

1. University Core Curriculum—55 hours. (See page 69.)
  2. Communication Department Core—15 hours
    - COM 1133 Mass Media and Culture
    - COM 2123 News Writing I
    - COM 2153 News Writing II
    - COM 2523 Public Speaking
    - COM 4293 Communication Law and Ethics
  3. Journalism Core—22 hours
    - ART 2403 Introduction to Photography
    - COM 2333 Editing
    - COM 3353 Public Relations Writing
    - COM 3363 Magazine Writing
    - COM 3373 Editorial and Interpretative Writing
    - COM 4461 Senior SeminarTwo of the following:
    - ART 3183 Social Documentary Photography
    - COM 2423 Broadcast News
    - COM 4253 Integrated Media
    - COM 4323 Advertising
  4. Journalism Practicum—6 to 12 hours, including a minimum of six hours spent on the campus newspaper. Prerequisites: COM 2123, 2153, and 2333, or consent of instructor. A maximum of 12 hours credit in communications practicum may apply toward the bachelor's degree. Practicum hours may not substitute for course work.
  5. Supporting Courses—6 hours
    - ART 1123 Computer Graphics
    - ART 2253 Graphic Design I
  6. Minor field or electives as necessary to complete minimum total hours. Journalism majors may not minor in Public Relations.
- Minimum total semester hours . . . . .124

**Requirements for the Associate of Science (A.S.) degree with major in Journalism**

1. University Core Curriculum for A.S. degrees—28 hours. (See page 77.)
2. Journalism Department Core—12 hours
  - COM 2123 News Writing I
  - COM 2153 News Writing II
  - COM 2333 Editing
  - COM 3363 Magazine Writing



- 3. Journalism Practicum—4 hours on the campus newspaper. Prerequisite:  
COM 2123 Practicum hours may not replace course work.
- 4. Supporting Courses—6 hours  
COM 2523 Public Speaking  
One of the following:  
ART 1123 Computer Graphics  
ART 2403 Introduction to Photography
- 5. Electives as necessary to complete minimum total hours  
Minimum total semester hours . . . . .62

**Requirements for minor in Journalism**

The student must successfully complete a minimum of 22 hours.

- Required Courses—18 hours  
COM 2123 News Writing I  
COM 2153 News Writing II  
COM 2333 Editing  
COM 3363 Magazine Writing  
COM 3373 Editorial and Interpretative Writing  
One of the following:  
ART 1123 Computer Graphics  
ART 2403 Introduction to Photography

Journalism Practicum—4 hours on the campus newspaper. Prerequisite:  
COM 2123

**Requirements for minor in Performance Studies**

The student must successfully complete a minimum of 20 hours.

- Required Courses—20 hours  
COM 1112 Freshman Theatre Workshop  
COM 1123 Broadcasting Performance  
COM 1203 Liberal Arts Foundations for the Musician  
COM 2523 Public Speaking  
COM 3113 Theatre Workshop  
COM 3523 Oral Interpretation  
One of the following:  
COM 2083 Masterpieces of Film  
COM 2121 Practicum in Forensics (three semesters)  
COM 3553 Interpersonal Communication  
COM 4583 Selected Topics in Performance Studies

At least six hours must be upper-division courses.

**Requirements for the Bachelor of Science (B.S.) degree with major in Public Relations**

1. University Core Curriculum—55 hours. (See page 69.)
  2. Communication Department Core—15 hours
    - COM 1133 Mass Media and Culture
    - COM 2123 News Writing I
    - COM 2153 News Writing II
    - COM 2523 Public Speaking
    - COM 4293 Communication Law and Ethics
  3. Public Relations Core—22 hours
    - ART 2403 Introduction to Photography
    - COM 2333 Editing
    - COM 3353 Public Relations Writing
    - COM 3363 Magazine Writing
    - COM 4323 Advertising
    - COM 4453 Public Relations Planning
    - COM 4461 Senior Seminar

One of the following:

    - ART 3183 Social Documentary Photography
    - COM 2423 Broadcast News
    - COM 3373 Editorial and Interpretative Writing
    - COM 4253 Integrated Media
  3. Practicum—6 hours minimum, including at least four credits earned by working on the campus newspaper. Prerequisites: COM 2123 and 2333 or consent of the department chair. A maximum 12 hours of practicum may apply to the bachelor's degree. Broadcasting practicums may be substituted after eight hours in Journalism practicums have been completed. Practicum hours may not replace course work.
  4. Supporting Courses—6 hours
    - ART 1123 Computer Graphics
    - ART 2253 Graphic Design I
  5. Minor field or electives as necessary to complete minimum total hours. Public Relations majors may not minor in Journalism.
- Minimum total semester hours . . . . .124

**Requirements for the Associate of Science (A.S.) degree with major in Public Relations**

1. University Core Curriculum for A.S. degree—28 hours. (See page 77.)
2. Public Relations Core—15 hours
  - ART 1123 Computer Graphics
  - COM 2123 News Writing I
  - COM 2333 Editing
  - COM 3353 Public Relations Writing

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- COM 4453 Public Relations Planning
  - 3. Journalism Practicum—4 hours, including three hours earned by working on the campus newspaper. Prerequisite: COM 2123
  - 4. Supporting Courses—6 hours
    - COM 2523 Public Speaking
    - COM 4323 Advertising
  - 5. Electives as necessary to complete minimum semester hours
- Minimum total semester hours . . . . .62

### Requirements for minor in Public Relations

The student must successfully complete a minimum of 22 hours.

Required Courses—18 hours

- ART 1123 Computer Graphics
- COM 2123 News Writing I
- COM 2333 Editing
- COM 3353 Public Relations Writing
- COM 4323 Advertising
- COM 4453 Public Relations Planning

Journalism Practicum—4 hours, including two hours earned by working on the campus newspaper. Prerequisite: COM 2123

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## DEPARTMENT OF MUSIC

(SYMBOL: MUS)

For those wishing to follow careers in music and/or worship ministries, courses are offered leading to the degrees of Bachelor of Arts, Bachelor of Science, and Bachelor of Music Education (through the Division of Education). These curricula provide a well-rounded education for those wishing to enter the music profession as artists, teachers, conductors, church worship leaders and tech support, and musicians in other fields. In addition, the degrees in general music are designed for students who want to earn a degree in music with the option to explore other avenues of intellectual inquiry. Students often complete a second major or minor in a field outside music.

All programs in music are closely allied with work in Bible, liberal arts, and technological departments, also providing students majoring outside the Department of Music the opportunity to study music as a minor or as electives.

### Departmental Requirements for the Major/Minor

In addition to satisfying the university's general requirements for admission (see page 37), all applicants must audition for admission to the Music

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Program. During the audition, each candidate must demonstrate musical ability and potential, including a good sense of rhythm and the ability to sing true pitch.

1. Vocal major Audition:
  - a. Performance of two prepared songs. Suggested works include songs by classical composers (in a foreign language, if possible) and songs from operettas or Broadway musicals.
  - b. Demonstration of skills at the keyboard or other instrument, as applicable. (Lack of piano skills will not preclude admittance to the music degree. However, music majors must demonstrate specific piano skills before degree completion. Appropriate classes or private study will be required of all students based on keyboard proficiency.)
2. Piano or Organ major Audition:
  - a. Performance of two prepared selections from traditional literature representing contrasting style periods.
  - b. Playing of the scale and arpeggio on the tonic chord from any major or minor key.
3. Worship Ministries Audition:
  - a. Performance of two contrasting selections, one art song and one praise and worship song, demonstrating the applicant's vocal and/or instrumental abilities.
  - b. Guitarists are required to demonstrate contrasting style in strumming and picking technique.

Students entering during the fall semester should complete the auditions by April 1. Audition forms are available online at [www.jbu.edu/music](http://www.jbu.edu/music).

An on-campus audition is preferable both for the student and for the faculty, but in cases where travel to Siloam Springs presents an insurmountable hardship, a recording incorporating the specified audition requirements will suffice. Students accepted on the basis of a recorded audition will need to complete the remainder of the process during the freshman orientation prior to registration. They may be asked to present part of their audition at that time.

Students are advised to complete all aspects of the audition as early in the high school senior year as possible. Those with deficiencies will be advised, so that they may begin to work in the necessary area(s) before entering the university. Upon entrance, those who have not met the departmental standards may be granted permission by the music faculty to declare a provisional Music major until such deficiencies are eliminated. Prerequisite work in the major applied area is designated as MUS 09\_1 and does not count toward the major, the minor, or graduation hours. Once the deficiencies are removed, a student enrolls for degree credit in the applied field (MUS 19\_1 or 19\_2). Students entering with deficiencies

in the major applied area typically require nine or ten semesters, rather than the standard eight, to finish the baccalaureate degree. The B.Mus.Ed. is a nine-semester degree: eight semesters of course work and the ninth semester spent in an internship. It is only possible to complete the degree in eight semesters if a student transfers in approved hours.

### **Music Scholarships**

The awarding of a music scholarship is based primarily on musical ability as determined in the audition for admission described above, or on ability demonstrated in ongoing applied instruction. After receiving a scholarship, the student must earn a GPA of 2.0 each semester, a 3.0 GPA in the major applied area, and a 2.5 cumulative GPA to retain the scholarship. Scholarships are reviewed annually and may be adjusted higher or lower based upon the merit of the recipient's academic and applied work.

A student majoring in any music program may expect to retain a scholarship for eight semesters providing the above criteria are met. An exception is made for a student in the music education program who is completing the internship during a ninth semester. If a student fails to meet any portion of the scholarship requirements, that student will be placed on probation, but will retain the music scholarship for the following semester. At the end of the probationary period, the progress of the student will be reassessed. At such time, the music scholarship will either be continued or discontinued.

### **General Requirements for Music Degrees**

1. **Demonstrated potential.** Each candidate must select a major subject (voice, piano, or organ), meet yearly requirements as set by the music faculty, and fulfill all stated degree requirements. The B.A. with an emphasis in voice, piano, or organ (see page 124) requires that students demonstrate adequate potential in performance before being allowed to pursue this degree program. Official admittance occurs at the end of the second semester of the sophomore year, only upon recommendation of the faculty, after the student has passed the Upper-Division Admittance Exam. Students desiring to pursue the performance degree must enroll each term in two-credit applied lessons in the major area.
2. **Ensemble participation.** Each music major is required to participate satisfactorily in at least one ensemble per semester at JBU. (The faculty may grant exceptions to students in directed teaching or to students taking fewer than six hours.) Up to four hours of Accompanying Practicum (after meeting the specified prerequisites) may count as ensemble credit for those whose major instrument is piano. Students may choose music theatre, choral, or instrumental groups. Qualified non-music majors are encouraged to participate.

3. **Recital attendance.** Each student in a Music Department program must attend a specified number of recitals. Failure to meet the recital attendance requirements adversely affects the grade in Applied Music.
4. **Recital participation.** All music majors enrolled in applied lessons are required to perform in a departmental recital once during the first two semesters of study and at least once each semester thereafter, or at the discretion of the teacher.
5. **Jury exams.** Counterparts to final exams in lecture courses, juries are scheduled at the end of each semester of applied study. Jury grades assigned by the adjudicators have an impact on the applied course grade, although the final grade is assigned at the discretion of the instructor.
6. **Piano proficiency.** Proficiency may be established by successful completion of a minimum GPA of 2.5 in one of the following tracks:
  - a. MUS 1931, 1941, 2931, 2941 Class Piano I-IV
  - b. MUS 1941, 2931, 2941 Class Piano II-IV, plus one semester of MUS 1991 Applied Piano
  - c. MUS 2931, 2941 Class Piano III and IV, plus two semesters of MUS 1991 Applied Piano
  - d. Two semesters of MUS 1991 Applied Piano, and  
MUS 2151 Functional Keyboard Skills I  
MUS 2161 Functional Keyboard Skills II

Qualified non-keyboard majors may enroll in piano and organ lessons with an upper-division number (3000+) only after taking four semesters of keyboard and passing the Upper-Division Applied Admittance Exam.

7. **Upper-Division Applied Admittance Exam.** The Upper-Division Applied Admittance Exam is taken by a) Music majors who need to earn upper-division credit in applied music and b) Worship Ministries majors. It is taken instead of the jury at the end of the fourth semester of degree credit in the major applied area, and it is twice the length of a usual jury.

The student must pass the “a” part of the exam in the respective applied area (see below) before earning upper-division credit in applied music; if the student does not pass the “a” requirement, the next semester of study is taken for additional lower-division credit.

A student who does not pass the other parts of the exam in the respective applied area may earn upper-division credit in the applied area for the next semester, but will re-take those other parts of the exam at the end of the next semester of study. If the student fails a second time, subsequent applied study will be for lower-division credit until the student passes all remaining parts of the exam.

The same policy applies to transfer students. They must pass the “a” part of the exam in the respective applied area in order to register for upper-division credit for the next semester. If they fail any other parts of the exam not passed on the first attempt, they must re-take those parts of the exam at the end of that semester in order to continue to earn upper-level credit. Otherwise, subsequent applied study will be for lower-division credit until they pass all remaining parts of the exam.

Voice majors and concentrates are expected to

- a. perform repertoire from memory in four languages (English, Italian, French, and German) of varying styles, and demonstrating developing musicality and expressiveness; and
- b. sightread a song of medium difficulty.

Worship Ministries majors are expected to

- a. perform vocal repertoire from memory in two languages (English, Italian, French, or German) of varying styles, at the discretion of the instructor, and demonstrating developing musicality and expressiveness; and
- b. sightread a song of medium difficulty.

Piano majors and concentrates are expected to

- a. play advanced literature from three of the following style periods: (1) Baroque (Bach WTC or comparable—more difficult than Two-part Inventions); (2) Classical (Beethoven or Mozart sonata or comparable literature); (3) Romantic (Chopin, Brahms); and (4) Impressionistic/20th century (Debussy, Prokofieff). At least one piece or movement is to be completely memorized. The performance of these requirements should be stylistically convincing and the performer should display a developing sense of musicality and expressiveness;
- b. play major, harmonic, and melodic minor scales for four octaves in sixteenth notes at a minimum tempo of MM=120 per quarter note, hands together;
- c. play major and minor arpeggios in all inversions for four octaves in sixteenth notes at a minimum tempo of MM=100 per quarter note, hands together;
- d. play major and minor cadences (I-IV-I<sub>4</sub><sup>6</sup>-V<sup>7</sup>-1) with right hand in all inversions and left hand in octaves; and
- e. sightread (1) a hymn having three or more sharps or flats in the key signature with intermediate rhythmic complexity and (2) a vocal accompaniment of an early-intermediate level.

Organ majors and concentrates are expected to

- a. play one work from each of these style periods: (1) Baroque, (2) Romantic, and (3) 20th century. The performance of these requirements should be stylistically convincing and the performer



- should display a developing sense of musicality and expressiveness;
- b. play an introduction and two stanzas of a hymn. The stanzas must be played in a contrasting manner, as appropriate for the text;
- c. play a hymn transposed up or down a half-step and whole step; and
- d. sightread (1) a hymn having three or more sharps or flats in the key signature with intermediate rhythmic complexity and (2) a simple work in trio texture.

Each candidate for the B.A. degree with an emphasis in Organ is also required to earn the Service Playing Certificate (SPC) of the American Guild of Organists before entering upper-level work.

8. **Recital or Presentation.** A candidate for the B.A. degree with emphasis in Applied Music Performance is required to present a half recital during the junior year (MUS 3900) and a full recital during the senior year (MUS 4900). These recitals cannot take place during consecutive semesters.

A candidate for the B.A. or B.S. degree in General Music has the choice between a half recital during the senior year (MUS 4900) or a Senior Presentation (MUS 4910).

A candidate for the B.Mus.Ed. degree is required to perform a half recital during the senior year (MUS 4900).

Recitalists are required to enroll in applied lessons during the semester the recital is scheduled. Similarly, those choosing the Senior Presentation must enroll in MUS 4191 Senior Presentation Preparation for faculty mentoring.

A candidate for the Worship Ministries degree must complete the Internship and Senior Presentation (MUS 4553) upon advisor recommendation.

9. **Major Field Test in Music.** Music majors are required to take the Major Field Test in Music as a condition of graduation after completing MUS 3113 and 3223. If one of these courses is taken in the last semester of study, the Major Field Test should be taken as late in the semester as practical.

10. **Certification for Organists.** All candidates for the B.A. with emphasis in Organ must take the examination for the Colleague Certificate of the American Guild of Organists (CAGO) no later than the beginning of the last semester of study.

## **Requirements for the Bachelor of Arts (B.A.) degree in Music with emphasis in Organ, Piano, or Voice**

1. University Core Curriculum—52 hours. (See page 69.)



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The Arts elective is covered by program requirements.

2. Courses Specified by this Department—28 hours
  - MUS 1111 Musicianship I
  - MUS 1113 Theory I
  - MUS 1203 Liberal Arts Foundations for the Musician
  - MUS 2111 Musicianship II
  - MUS 2113 Theory II
  - MUS 2121 Musicianship III
  - MUS 2123 Theory III
  - MUS 3113 Harmonic Form and Analysis
  - MUS 3213 History of Music I
  - MUS 3223 History of Music II
  - MUS 3411 Conducting I
  - MUS 3900\* Junior Recital
  - MUS 4103\* Music Arranging with MIDI
  - MUS 4900\* Senior Recital
3. One of the following Emphases—33 hours
  - Voice
    - MUS 1911 Lyric Diction I
    - MUS 1921 Lyric Diction II
    - MUS 1931/41, 2931/41 Class Piano I-IV (See other options, page 122)
    - MUS 1980/3980 Voice Masterclass (each semester of Applied Voice)
    - MUS 1981\* Applied Voice: 8 hours
    - MUS 3981\* Applied Voice: 8 hours
    - MUS 4281 Vocal Literature
    - MUS 4382 Vocal Pedagogy
    - Music Theatre—6 hours from MUS 1731, 1732, 3731, 3732
    - Choral Ensemble—2 hours minimum
  - Piano
    - Applied Piano Option A or B
    - A. MUS 1991\* Applied Piano: 7 hours
      - MUS 1781\* Applied Accompanying
      - MUS 3991\* Applied Piano: 8 hours
    - B. MUS 1991\* Applied Piano: 8 hours
      - MUS 3781\* Applied Accompanying
      - MUS 3991\* Applied Piano: 7 hours
    - MUS 1990/3990 Piano Masterclass (each semester of Applied Piano)
    - MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)
    - MUS 2151 Functional Keyboard Skills I
    - MUS 2161 Functional Keyboard Skills II
    - MUS 2601 Accompanying Class
    - MUS 3601 Music Practicum: Accompanying
    - MUS 4261 Piano Pedagogy

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MUS 4262 Piano Literature  
Ensemble participation: 8 hours

Organ

MUS 1971\* Applied Organ: 8 hours  
MUS 3971\* Applied Organ: 8 hours  
MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)  
MUS 1990/3990 Piano Masterclass (each semester of Applied  
Organ)  
MUS 2151 Functional Keyboard Skills I  
MUS 2161 Functional Keyboard Skills II  
MUS 2601 Accompanying Class  
MUS 3611 Music Practicum: Church Organist  
MUS 4273 Organ Literature and Pedagogy  
Ensemble participation: 8 hours

\*See Music Fee Schedule, page 45.

4. Foreign Language—12 hours in French or German, or six hours in each. Other languages may be substituted only by approval of advisor (Completion of an intermediate language course covers the Global Studies elective.)

Minimum total semester hours . . . . . 124

**Requirements for the Bachelor of Arts (B.A.) degree with major in General Music**

1. University Core Curriculum—52 hours. (See page 69.)  
The Arts elective is covered by program requirements.
2. Courses Specified by this Department—29 hours
- MUS 1111 Musicianship I
  - MUS 1113 Theory I
  - MUS 1203 Liberal Arts Foundations for the Musician
  - MUS 2111 Musicianship II
  - MUS 2113 Theory II
  - MUS 2121 Musicianship III
  - MUS 2123 Theory III
  - MUS 3113 Harmonic Form and Analysis
  - MUS 3213 History of Music I
  - MUS 3223 History of Music II
  - MUS 3411 Conducting I
  - MUS 4103\* Music Arranging with MIDI
- Capstone Option A or B:
- A. MUS 39\_1\* Applied Lessons  
MUS 4900\* Senior Recital (half recital)
  - B. MUS 4191\* Senior Presentation Preparation  
MUS 4910\* Senior Presentation

3. One of the following Concentrations—8 hours

Voice

- MUS 1981\* Applied Voice: 4 hours
- MUS 1980 Voice Masterclass: 4 semesters
- MUS 1931/41, 2931/41\* Class Piano I-IV (See other options, page 122)

Piano

- MUS 1991\* Applied Piano: 4 hours
- MUS 1990 Piano Masterclass: 4 semesters
- MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)
- Accompanying—2 hours from MUS 1781, 2601

Organ

- MUS 1971\* Applied Organ: 4 hours
- MUS 1990 Piano Masterclass: 4 semesters
- MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)
- Accompanying—2 hours from MUS 1781, 2601
- Ensemble participation: 4 hours

\*See Music Fee Schedule, page 45.

3a. Successful completion of the Upper-Division Applied Admittance Exam in the applied concentration area.

*Any additional hours in applied area will count as music electives. Any hours taken after passing the Upper-Division Applied Admittance Exam will be taken at the 3000-level for upper-division credit.*

4. Foreign language—12 hours in French or German, or six hours in each. Other languages may be substituted only by approval of advisor. (Completion of an intermediate language course covers the Global Studies elective.)

5. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . . 124

**Requirements for the Bachelor of Science (B.S.) degree with major in General Music**

1. University Core Curriculum—52 hours. (See page 69.)

The Arts elective is covered by program requirements.

2. Courses Specified by this Department—29 hours

- MUS 1111 Musicianship I
- MUS 1113 Theory I
- MUS 1203 Liberal Arts Foundations for the Musician
- MUS 2111 Musicianship II
- MUS 2113 Theory II
- MUS 2121 Musicianship III
- MUS 2123 Theory III
- MUS 3113 Harmonic Form and Analysis

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- MUS 3213 History of Music I
- MUS 3223 History of Music II
- MUS 3411 Conducting I
- MUS 4103\* Music Arranging with MIDI

Capstone Option A or B:

- A. MUS 39\_1\* Applied Lessons  
MUS 4900\* Senior Recital (half recital)
- B. MUS 4191 Senior Presentation Preparation  
MUS 4910\* Senior Presentation

### 3. One of the following Concentrations—8 hours

Voice

- MUS 1981\* Applied Voice: 4 hours
- MUS 1980 Voice Masterclass: 4 semesters
- MUS 1931/41, 2931/41\* Class Piano I-IV (See other options, page 122)

Piano

- MUS 1991\* Applied Piano: 4 hours
- MUS 1990 Piano Masterclass: 4 semesters
- MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)  
Accompanying—2 hours from MUS 1781, 2601

Organ

- MUS 1971\* Applied Organ: 4 hours
- MUS 1990 Piano Masterclass: 4 semesters
- MUS 1951/61 Class Voice (or 2 hours of Applied Voice\*)  
Accompanying—2 hours from MUS 1781, 2601  
Ensemble participation: 4 hours

\*See Music Fee Schedule, page 45.

### 3a. Successful completion of the Upper-Division Applied Admittance Exam in the applied concentration area.

*Any additional hours in applied area will count as music electives. Any hours taken after passing the Upper-Division Applied Admittance Exam will be taken at the 3000-level for upper-division credit.*

### 4. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . . 124

## **Requirements for the Bachelor of Music Education (B.Mus.Ed.) degree with major in Music, P-8 and 7-12 certification**

1. University Core Curriculum—46 hours. (See page 69.)  
The Arts and Social Science electives are covered by program requirements. The Philosophy elective is not required for this program.
2. Other Required Courses—3 hours  
Approved First Aid and CPR course (age appropriate)  
COM 2523 Public Speaking

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3. Professional Education—31 hours
  - ED 1114 Educational Foundations and Technology
  - ED 2113 Human Growth and Development
  - ED 2133 Educational Psychology
  - ED 2713 Education of the Exceptional Student
  - ED 3183 Educational Assessment
  - ED 4890 Internship: P-12
  - ED 4891 Seminar: P-12
4. Music Teaching Field—46 hours
  - MUS 1111 Musicianship I
  - MUS 1113 Theory I
  - MUS 1203 Liberal Arts Foundations for the Musician
  - MUS 1911 Lyric Diction I
  - MUS 1921 Lyric Diction II
  - MUS 2111 Musicianship II
  - MUS 2113 Theory II
  - MUS 2121 Musicianship III
  - MUS 2123 Theory III
  - MUS 3101 Survey of Instruments
  - MUS 3113 Harmonic Form and Analysis
  - MUS 3213 History of Music I
  - MUS 3223 History of Music II
  - MUS 3301 Choral Techniques
  - MUS 3313 Public School Music Methods, P-8
  - MUS 3411 Conducting I
  - MUS 3421 Conducting II
  - MUS 4103\* Music Arranging with MIDI
  - MUS 4382 Vocal Pedagogy
  - MUS 4573 Public School Music Methods, 7-12
  - MUS 4900\* Senior Recital (half recital)
  - Ensemble Participation: 4 semesters
  - One of the followng:
    - MUS 1731 Music Theatre Methods
    - MUS 1732 Music Theatre Production
5. One of the following Concentrations—11 hours
  - Voice
    - Applied Voice Option A or B:
      - A. MUS 1981\* Applied Voice: 4 hours
      - MUS 3981\* Applied Voice: 3 hours
      - B. MUS 1951/61 Class Voice: 2 hours
      - MUS 1981\* Applied Voice: 2 hours
      - MUS 3981\* Applied Voice: 3 hours
    - MUS 1980/3980 Voice Masterclass (each semester of Applied Voice)
    - MUS 1931/41, 2931/41\* Class Piano I-IV (See other options, page 122)

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Piano

Applied Piano Option A or B:

A. MUS 1991\* Applied Piano: 3 hours

MUS 1781\* Applied Accompanying

MUS 3991\* Applied Piano: 2 hours

B. MUS 1991\* Applied Piano: 4 hours

MUS 3781\* Applied Accompanying

MUS 3991\* Applied Piano: 1 hour

MUS 1990/3990 Piano Masterclass (each semester of Applied Piano)

MUS 2151 Functional Keyboard Skills I

MUS 2161 Functional Keyboard Skills II

MUS 1951/61 Class Voice (or two hours of Applied Voice\*)

MUS 4261 Piano Pedagogy

Organ

MUS 1971\* Applied Organ: 4 hours

MUS 3971\* Applied Organ: 3 hours

MUS 1990/3990 Piano Masterclass (each semester of Applied Organ)

MUS 2151 Functional Keyboard Skills I

MUS 2161 Functional Keyboard Skills II

MUS 1951/61 Class Voice (or two hours of Applied Voice\*)

\*See Music Fee Schedule, page 45.

Minimum total semester hours . . . . .137

**Requirements for the Bachelor of Science (B.S.) degree with major in Worship Ministries**

1. University Core Curriculum—52 hours. (See page 69.)

The Arts elective is covered by program requirements.

2. Courses Specified by this Department—26 hours

MUS 1111 Musicianship I

MUS 1113 Theory I

MUS 1203 Liberal Arts Foundations for the Musician

MUS 1931/41, 2931/41\* Class Piano I-IV (See other options, page 122)

MUS 2111 Musicianship II

MUS 2113 Theory II

MUS 3213 History of Music I

MUS 3411 Conducting I

MUS 4103\* Music Arranging with MIDI

Vocal Instruction—4 hours from MUS 1951/61/81\* (Class or Applied)

2a. Successful completion of the Upper-Division Applied Admittance Exam (See page 122.)

3. Worship Ministries Core—41 hours
- BBL 3353 Theology of Worship
  - BBL 3363 History of the Christian Church I
  - BBL 3373 History of the Christian Church II
  - CMN 1213 Christian Leadership and Service
  - MUS 1851/3851 Music Ministries Ensemble
  - MUS 2232 Contemporary Worship Music in Theory and Practice
  - MUS 2503 Worship Ministry I: Orientation
  - MUS 2513 Worship Ministry II: Materials and Methods
  - MUS 3101 Survey of Instruments
  - MUS 3323 Children’s Music Ministry Methods
  - MUS 3563\* Audio Technology I
  - MUS 3651 Music Practicum: Chapel Leader
  - MUS 3951 Contemporary Worship Techniques
  - MUS 4553\* Internship and Senior Presentation
- Ensemble participation: 4 semesters
- One of the following:
- MUS 1731 Music Theatre Methods
  - MUS 1732 Music Theatre Production
- One of the following:
- MUS 1791\* Applied Guitar
  - MUS 2901 Guitar in Worship
- \*See Music Fee Schedule, page 45.
4. Electives as necessary to complete minimum semester hours
- Minimum total semester hours . . . . . 124

**Requirements for minor in Music**

The student must successfully complete a total of 18 hours comprising work in the classroom, ensemble participation, and private instruction in applied music (either private or class)—voice, piano, organ, or other approved instrument.

Required Courses—12 hours

- MUS 1111 Musicianship I
- MUS 1113 Theory I
- MUS 1203 Liberal Arts Foundations for the Musician
- Applied Music Instruction\*: 4 hours (either private or class)
- Ensemble Participation: 1 hour

Six hours from the following:

- MUS 3213 History of Music I
- MUS 3223 History of Music II
- MUS 3323 Children’s Music Ministry Methods
- MUS 3411 Conducting I

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- MUS 3563\* Audio Technology I
- MUS 4261 Piano Pedagogy
- MUS 4262 Piano Literature
- MUS 4273 Organ Literature and Pedagogy
- MUS 4281 Vocal Literature
- MUS 4291 Choral Literature
- MUS 4382 Vocal Pedagogy
- MUS 4563\* Audio Technology II

Please note required prerequisites for each course as specified in the Course Descriptions.

\* See Music Fee Schedule, page 45.

### Requirements for minor in Worship Ministries

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- MUS 1111 Musicianship I
  - MUS 1113 Theory I
  - MUS 2503 Worship Ministry I: Orientation
  - MUS 2513 Worship Ministry II: Methods and Materials
  - MUS 3101 Survey of Instruments
  - MUS 3411 Conducting I
  - MUS 3563\* Audio Technology I
  - MUS 3851 Music Ministries Ensemble
  - Piano instruction—2 hours from MUS 1931\*/41\*/91\* (Class or Applied)
  - Vocal instruction—2 hours from MUS 1951/61/81\* (Class or Applied)
- One of the following
- MUS 1791\* Applied Guitar
  - MUS 1901 Basic Guitar Techniques
  - MUS 2901 Guitar in Worship

\* See Music Fee Schedule, page 45.

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## DEPARTMENT OF VISUAL ARTS

(SYMBOL: ART)

The Department of Visual Arts offers the Bachelor of Science (B.S.) Degree with majors in Art and Illustration, Digital Media Arts (with concentrations in Digital Art and Cinema), Graphic and Web Design, and Photography. Minors are available in all four areas.

All major programs require a common Visual Arts Core of 15 hours and an additional 36 hours in the specialized field.



The Department of Visual Arts is housed in a state-of-the-art building featuring the latest equipment in two MAC labs, theatre-style classroom, painting and drawing classrooms, graphic design classrooms, photography studios, and a traditional and digital darkroom. We also have a busy art gallery that features monthly exhibits, including an annual show of “Student Works.”

All of the Visual Arts degrees are highly demanding of student time, energy, and talent. The goal of these multi-faceted programs is to graduate industry-ready professionals who are prepared to step into positions which demand diverse proficiencies. All students participate in either an internship or senior project and prepare a portfolio to further aid them in their professional development. Our students are strongly encouraged to participate in foreign study and mission opportunities as a way to broaden their understanding of our world and to enrich their Christian worldview.

### **Requirements for the Bachelor of Science (B.S.) degree with major in Art and Illustration**

1. University Core Curriculum—52 hours. (See page 69.)  
The Arts elective is covered by program requirements.
2. Visual Arts Department Core—15 hours
  - ART 1123 Computer Graphics
  - ART 1133 Visual Art Foundation
  - ART 2213 Color Studies
  - ART 2403 Introduction to Photography
 One of the following:
  - ART 2153 European Arts and Culture
  - ART 2233 Art History I
  - ART 2343 European Art Tour
3. Art and Illustration Core—15 hours
  - ART 1243 Drawing I
  - ART 2453 Drawing II
  - ART 2613 Digital Illustration I
  - ART 3323 Figure Drawing I
  - ART 3423 Figure Drawing II
4. One of the following tracks—21 hours:

#### **Illustration Concentration**

- ART 3453 Illustration I
- ART 3463 Illustration II
- ART 4103 Portfolio and Presentation
- ART 4313 Illustration III
- ART 4963 Senior Comprehensive Project

Two of the following:

- ART 3363 Watercolor Painting I

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- ART 3373 Watercolor Painting II
- ART 3383 Oil Painting I
- ART 3393 Oil Painting II
- ART 3643 Introduction to Printmaking
- ART 3653 Screenprinting

**Fine Art Concentration**

- ART 3233 Art History II
- ART 3623 Advanced Studio I
- ART 3633 Advanced Studio II
- ART 4953 Capstone Exhibition

Three of the following:

- ART 3363 Watercolor Painting I
- ART 3373 Watercolor Painting II
- ART 3383 Oil Painting I
- ART 3393 Oil Painting II
- ART 3643 Introduction to Printmaking
- ART 3653 Screenprinting

4. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

**Requirements for minor in Art and Illustration**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ART 1133 Visual Art Foundation
- ART 1243 Drawing I
- ART 2233 Art History I
- ART 2453 Drawing II
- ART 3453 Illustration I

Six hours from the following:

- ART 3323 Figure Drawing I
- ART 3363 Watercolor Painting I
- ART 3373 Watercolor Painting II
- ART 3383 Oil Painting I
- ART 3393 Oil Painting II
- ART 3463 Illustration II
- ART 3643 Introduction to Printmaking
- ART 3653 Screenprinting

**Requirements for the Bachelor of Science (B.S.) degree with major in Digital Media Arts**

1. University Core Curriculum—52 hours. (See page 69.)  
The Arts elective is covered by program requirements.

COMMUNICATION AND FINE ARTS

- 2. Visual Arts Department Core—15 hours
  - ART 1123 Computer Graphics
  - ART 1133 Visual Art Foundation
  - ART 2213 Color Studies
  - ART 2403 Introduction to Photography
  - One of the following:
    - ART 2153 European Arts and Culture
    - ART 2233 Art History I
    - ART 2343 European Art Tour
- 3. Digital Media Arts Core—36 hours

**Digital Art Concentration**

- ART 1243 Drawing I
- ART 2273 3D Art I
- ART 2453 Drawing II
- ART 2613 Digital Illustration I
- ART 3223 3D Art II
- ART 3323 Figure Drawing I
- ART 3423 Figure Drawing II
- ART 3453 Illustration I
- ART 3613 Digital Illustration II
- ART 4103 Portfolio and Presentation
- ART 4253 3D Art III
- ART 4963 Senior Comprehensive Project

**Cinema Concentration**

- ART 2103 Foundations in Digital Editing
- ART 2113 Introduction to Cinema
- ART 2123 Cinematography
- ART 2253 Graphic Design I
- ART 3153 Digital Darkroom
- ART 3403 Film Theory and Criticism
- ART 4103 Portfolio and Presentation
- ART 4163 Non-Fiction Film Production
- ART 4173 Narrative Film Production
- ART 4203 Scriptwriting
- ART 4423 Internship
- ART 4963 Senior Comprehensive Project

- 4. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

**Requirements for minor in Digital Media Arts**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ART 1123 Computer Graphics

- ART 1133 Visual Art Foundation
- ART 2103 Foundations in Digital Editing
- ART 2123 Cinematography
- ART 2273 3D Art I
- ART 2303 Interactive Design I
- ART 2613 Digital Illustration I

**Requirements for the Bachelor of Science (B.S.) degree with major in Graphic and Web Design**

1. University Core Curriculum—52 hours. (See page 69.)  
The Arts elective is covered by program requirements.
  2. Visual Arts Department Core—15 hours
    - ART 1123 Computer Graphics
    - ART 1133 Visual Art Foundation
    - ART 2213 Color Studies
    - ART 2403 Introduction to PhotographyOne of the following:
    - ART 2153 European Arts and Culture
    - ART 2233 Art History I
    - ART 2343 European Art Tour
  3. Graphic and Web Design Core—36 hours
    - ART 1243 Drawing I
    - ART 2253 Graphic Design I
    - ART 2263 Graphic Design II
    - ART 2303 Interactive Design I
    - ART 2503 Typography
    - ART 3203 History of Advertising and Design
    - ART 3333 Interactive Design II
    - ART 4103 Portfolio and Presentation
    - ART 4423 InternshipOne of the following:
    - ART 3263 Graphic Design III
    - ART 3743 Interactive Design IIISix hours from among the following:
    - ART 3153 Digital Darkroom
    - ART 3283 Graphic Design in Social Context
    - ART 4303 Interactive Design IV
    - ART 4413 Graphic Design IV
  4. Electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

**Requirements for minor in Graphic and Web Design**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ART 1123 Computer Graphics
- ART 1133 Visual Art Foundation
- ART 2253 Graphic Design I
- ART 2263 Graphic Design II
- ART 2303 Interactive Design I
- ART 2503 Typography
- ART 3333 Interactive Design II

**Requirements for the Bachelor of Science (B.S.) degree with major in Photography**

1. University Core Curriculum—52 hours. (See page 69.)  
The Arts elective is covered by program requirements.

2. Visual Arts Department Core—15 hours
  - ART 1123 Computer Graphics
  - ART 1133 Visual Art Foundation
  - ART 2213 Color Studies
  - ART 2403 Introduction to Photography

One of the following:

- ART 2153 European Arts and Culture
- ART 2233 Art History I
- ART 2343 European Art Tour

3. Photography Core—36 hours
  - ART 2253 Graphic Design I
  - ART 2263 Graphic Design II
  - ART 2303 Interactive Design I
  - ART 2463 Traditional Darkroom
  - ART 3133 Fine Art Photography
  - ART 3153 Digital Darkroom
  - ART 3183 Social Documentary Photography
  - ART 3203 History of Advertising and Design
  - ART 4103 Portfolio and Presentation
  - ART 4353 Commercial Studio Photography
  - ART 4423 Internship
  - ART 4963 Senior Comprehensive Project

4. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

## Requirements for minor in Photography

The student must successfully complete a minimum of 21 hours. Offered to a limited number of students with priority going to students majoring in Journalism and Public Relations.

Required Courses—21 hours

- ART 1133 Visual Art Foundation
- ART 2403 Introduction to Photography
- ART 3133 Fine Art Photography
- ART 3183 Social Documentary Photography
- ART 4353 Commercial Studio Photography

Six hours from the following:

- ART 2233 Art History I
- ART 2463 Traditional Darkroom
- ART 3153 Digital Darkroom

*DIVISION OF*  
**EDUCATION**

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*DIVISION OF*  
**EDUCATION**

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(SYMBOL: ED)

*Bricker, Davis, Gale, Lamborn, Parker, Van Thiel (chair)*

The Education Division offers experiences and courses designed to provide professional preparation for students who plan to teach in public or private (including Christian) schools. The division is committed to preparing competent teachers to work with all learners in a multicultural society of diverse learners. The programs of the division are approved by the Arkansas State Department of Education and are accredited by the National Council for the Accreditation of Teacher Education (NCATE), <http://ncate.org>, phone: (202)466-7496, the foremost accrediting agency for teacher education in the United States. Successful completion of an Education Program at John Brown University prepares candidates for an initial license in the State of Arkansas. Candidates who plan to teach in states other than Arkansas should transfer the Arkansas licensure and meet any specific licensure requirements of the states where they expect to teach. Licensure officials in the majority of the states automatically grant initial licensure to graduates of NCATE accredited Education programs. In addition, most states will grant initial licensure to individuals licensed in the State of Arkansas.

The university's Education programs are significantly enhanced through an active partnership of shared decision making with the Siloam Springs School District and the community. The Professional Development School partnership provides for the simultaneous support and renewal of both teacher preparation and the P-12 programs of the school district. Beginning in their sophomore year, candidates actively participate in local preschools and in the P-12 classrooms of the school district, where they provide valuable assistance to preschool and P-12 programs. At the same time, experienced teachers in the schools serve as clinical faculty providing important practical experiences and instruction for the candidates.

The Education Division, in keeping with the overall goals of the university, strives to provide candidates with the following:

1. A firm Christian foundation with respect to their personal, moral, and spiritual development.
2. Desirable values, ideals, and a sense of individual responsibility based upon Christ-like characteristics.

3. An appreciation of the opportunities for service in the teaching profession.
4. An understanding of the role of education in a pluralistic, democratic society.
5. Knowledge and skills necessary to respond to the individual differences of diverse learners.
6. Appropriate skills and techniques for effective teaching.
7. An introduction to the processes of teaching based on professional studies which are integrated with clinical and field-based experiences.
8. A knowledge of the growth and development of youth.
9. An awareness of the social, political, and economic realities that individuals experience in culturally diverse and complex human encounters.
10. A broad general education.
11. One or more academic areas of in-depth study.

## **PROGRESSION WITHIN THE EDUCATION PROGRAM**

Candidates for a teaching license are expected to carefully plan their academic programs beginning in their freshman year and to have their plan approved by an Education adviser. Candidates are required to maintain a portfolio in order to pass through four “Gates.” The following sequence and policies are applicable to all levels and fields of licensure:

1. Admission to field experience (Gate One). Specific requirements include the following:
  - a. Meet minimum JBU admission requirements for ACT/SAT scores: ACT=20, SAT=950.
  - b. Successfully complete designated portfolio requirements before registering for Education classes requiring Gate One.
  - c. Permission to release personal information to be used in appropriate situations to school personnel.
2. Formal admission to the Education Program (Gate Two). Specific requirements for admission include the following:
  - a. A 2.5 cumulative grade-point average in the courses required for the JBU Bachelor of Science in Education (B.S.E.) program.
  - b. Completion of the required English, math, and speech courses with a grade of ‘C/2.0’ or better in each. (Exception: Candidates for the P-4 Program will take ED 3121: Educational Communication in lieu of the speech course before internship. A grade of ‘C/2.0’ or better must also be attained in this course.)
  - c. Completion of ED 1114: Educational Foundations and Technology, with a grade of ‘C/2.0’ or better.

## EDUCATION

- d. Praxis I (PPST) scores which meet the state minimum requirements in reading, writing, and mathematics. (Information and test administration schedules are available on the ETS Website [www.ets.org]. Costs are the responsibility of the candidates.) Candidates whose scores do not meet the JBU Praxis I (PPST) minimums (higher than state) must submit an approved Professional Development Plan to improve these basic skills, or may meet the JBU cut-off scores by retaking the appropriate Praxis I (PPST) test(s).
  - e. Formal approval of the candidates' portfolios by the Education adviser before registration for Education classes requiring Gate Two.
3. Continuation in the program. Candidates must maintain the 2.5 grade-point standard throughout the program, achieve the JBU Praxis I (PPST) scores or complete the Professional Development Plan, and demonstrate commitment to professional growth. A student failing to maintain these requirements will be placed on divisional probation and must meet the conditions of a Professional Development Plan specified by the division, or admission will be rescinded.

*Note: John Brown University candidates wishing to take Professional Education and major field courses off campus or through correspondence must obtain, in advance, written permission from the division chair and from the registrar.*

4. Internship (Gate Three). Internship is normally taken during the senior year. Prior to registration for internship, candidates must meet the following requirements:
- a. Submission of a formal application by the specified date during the semester prior to the internship semester. (Application forms and dates for submission are sent via the Education office.)
  - b. Completion of specified prerequisites. (See course descriptions for internships.)
  - c. Completion of a minimum of 70% of required Teaching field courses.
  - d. A 2.5 or higher cumulative grade-point average.
  - e. A 2.5 or higher cumulative grade-point average in Teaching field courses, with a minimum grade of 'C/2.0' in each.
  - f. A 2.5 or higher cumulative grade-point average in all Professional Education courses completed, with a minimum grade of 'C/2.0' in each.
  - g. Completion of CPR/First Aid certification (age appropriate) before beginning internship.
  - h. Formal approval of the Gate Three portfolio which includes an interview by the Siloam Springs Public School and Education faculty.
  - i. Praxis II Series—(Documentation of passing the Praxis II Content Knowledge and having registered for Praxis II Pedagogy.) All candidates are required to take the Educational Testing Service (ETS) Praxis II Series, consisting of professional and teaching field tests related to each area in which the candidates are seeking to be licensed. The examination is required for licensure and a report of scores must be sent to the Education Division and the Arkansas State Department of Education. The "Detailed Information" portion of the Praxis II is kept on file for the purpose of analysis of

candidates' needs. Secondary majors must pass Content Knowledge before the Curriculum and Instruction course. Costs are the responsibility of the candidates.

Due to the nature of the internship—a full-time responsibility—candidates are not to be concurrently enrolled for other course work (including correspondence). Athletes, choir members, etc., are not permitted to schedule internship during a semester of participation in a sport or other activity which would interfere with this capstone professional experience.

5. Graduation requirements (Gate Four).
  - a. Satisfaction of all graduation requirements for the Bachelor of Science in Education (B.S.E.) or Bachelor of Music Education (B .Mus.Ed.) programs.
  - b. Recommendation by the division upon completion of an internship experience.
  - c. Approval of professional portfolio, which must include evidence of passing Content Knowledge and taking Pedagogy Praxis II Exams (i.e., registration form, ETS exam score report).
  - d. A 2.5 cumulative grade -point average.
  - e. A 2.5 in Teaching field requirements, with a grade of 'C/2.0' or higher in each course.
  - f. A 2.5 in Professional Education courses, with a grade of 'C/2.0' or higher in in each course.
6. Program completion and eligibility for an initial license
  - a. Graduation.
  - b Evidence of meeting the Arkansas qualifying scores on the Praxis II Series.

## **TESOL Endorsement**

Courses are available which would allow candidates to earn a TESOL endorsement. (See page 152.)

## **Education Minor**

The Division of Education offers an Education minor. Though the minor is not recognized for teacher licensure, the package of course work does provide a strong educational background for whatever teaching one may encounter: internationally, at the university level, in a non-traditional program, or in any career which would involve teaching others. This minor is available for Mathematics, English, History, Science, and Spanish majors. (See page 152.)

## **Transfer Students**

The credentials of students transferring from an accredited college or university will be evaluated by the registrar and by the chair of the Education Division for appropriate placement.

Students entering with fifty or more hours of transfer credit may enroll in restricted Professional Education courses, when necessary, during their first semester at JBU. JBU students who transfer from another major to Education under similar circumstances are under the same policy as transfer students. Each situation will be reviewed at the end of that semester to determine if the student is ready for admission. Students transferring from another major within the university, or from another university, will be expected to complete all program requirements in effect at the times of the transfer. Candidates must complete all Gate requirements (One through Four) in effect at the time of transfer.

Early Childhood Education (P-4) candidates must successfully complete at least two semesters at JBU including the JBU Spring Block II semester courses. Secondary Education candidates must successfully complete at least two semesters at JBU which includes Reading in the Content Area and Curriculum and Instruction: Secondary courses.

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## **PROGRAMS LEADING TO PRESCHOOL/EARLY ADOLESCENCE (P-8) AND ADOLESCENCE/YOUNG ADULTHOOD (7-12) LICENSURE**

### **VOCAL MUSIC (GRADES P-8, 7-12)**

#### **Requirements for the Bachelor of Music Education (B.Mus.Ed.) degree with major in Music**

1. University Core Curriculum—46 hours. (See page 69.)  
The Arts and Social Science elective areas are covered by program requirements.  
The Philosophy elective is not required for this program.
2. Other Required Courses  
Approved First Aid/CPR Course (age appropriate) before Internship  
COM 2523 Public Speaking
3. Professional Education—31 hours
 

|    |      |  |
|----|------|--|
| ED | 1114 | Educational Foundations and Technology |
| ED | 2113 | Human Growth and Development           |
| ED | 2133 | Educational Psychology                 |
| ED | 2713 | Education of the Exceptional Student   |
| ED | 3183 | Educational Assessment                 |
| ED | 4890 | Internship: P-12                       |
| ED | 4891 | Seminar: P-12                          |
4. Music Teaching Field—69-72 hours  
MUS 1111 Musicianship I

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- MUS 1113 Theory I
- MUS 1203 Liberal Arts Foundations for the Musician
- MUS 1911 Lyric Diction I
- MUS 1921 Lyric Diction II
- MUS 2111 Musicianship II
- MUS 2113 Theory II
- MUS 2121 Musicianship III
- MUS 2123 Theory III
- MUS 3101\* Survey of Instruments
- MUS 3113 Harmonic Form and Analysis
- MUS 3213 History of Music I
- MUS 3223 History of Music II
- MUS 3301 Choral Techniques
- MUS 3313 Public School Music Methods, P-8
- MUS 3411 Conducting I
- MUS 3421 Conducting II
- MUS 4103\* Music Arranging with MIDI
- MUS 4382 Vocal Pedagogy
- MUS 4573 Public School Music Methods, 7-12
- MUS 4900 Senior Recital (half recital)

Ensemble Participation: 4 semesters

One of the following:

- MUS 1731 Music Theatre Methods
- MUS 1732 Music Theatre Production

5. One of the following Concentrations—11 hours

Voice

Applied Voice Option A or B:

- A. MUS 1981\* Applied Voice: 4 hours  
MUS 3981\* Applied Voice: 3 hours
- B. MUS 1951/61 Class Voice: 2 hours  
MUS 1981\* Applied Voice: 2 hours  
MUS 3981\* Applied Voice: 3 hours

MUS 1980/3980 Voice Masterclass (each semester of Applied Voice)

Keyboard Instruction

- MUS 1931/41\*, 2931/41\* Class Piano I-IV

Piano

Applied Piano Option A or B:

- A. MUS 1991\* Applied Piano: 3 hours  
MUS 1781\* Applied Accompanying  
MUS 3991\* Applied Piano: 2 hours
- B. MUS 1991\* Applied Piano: 4 hours  
MUS 3991\* Applied Piano: 1 hour  
MUS 3781\* Applied Accompanying

MUS 1990/3990 Piano Masterclass (each semester of Applied Piano)

- MUS 2151 Functional Keyboard Skills I

MUS 2161 Functional Keyboard Skills II  
 MUS 1951/61\* Class Voice (or two hours of Applied Voice)  
 MUS 4261 Piano Pedagogy

Organ

MUS 1971\* Applied Organ: 4 hours  
 MUS 3971\* Applied Organ: 3 hours  
 MUS 1990/3990 Piano Masterclass (each semester of Applied Organ)  
 MUS 2151 Functional Keyboard Skills I  
 MUS 2161 Functional Keyboard Skills II  
 MUS 1951/61\* Class Voice (or two hours of Applied Voice)

\*See Music Fee Schedule, page 45.

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**PROGRAMS LEADING TO ADOLESCENCE/YOUNG ADULTHOOD LICENSURE (Grades 7-12)**

**Requirements for the Bachelor of Science in Education (B.S.E.) degree with major in an approved teaching field**

**ENGLISH EDUCATION**

1. University Core Curriculum—43 hours. (See page 69.)  
 The Social Science elective and EGL 1013, 1023, and 4003 are covered by program requirements.
2. Other Required Courses  
 Approved First Aid/CPR Course (age appropriate) before Internship  
 COM 2523 Public Speaking
3. Professional Education—37 hours
  - ED 1114 Educational Foundations and Technology
  - ED 2113 Human Growth and Development
  - ED 2133 Educational Psychology
  - ED 2713 Education of the Exceptional Student
  - ED 3153 Reading in the Content Areas
  - ED 3183 Educational Assessment
  - ED 4663 Curriculum and Instruction: Secondary English
  - ED 4880 Internship: 7-12 Education
  - ED 4881 Seminar: 7-12 Education
4. English Teaching Field—30 hours
  - EGL 1013 English I: Composition
  - EGL 1023 English II: Literary Analysis and Research
  - EGL 2213 World Literature I
  - EGL 2243 Young Adult Literature
  - EGL 2393 Advanced Composition



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- EGL 3333 Shakespearean Drama
- EGL 3363 Advanced English Grammar
- EGL 4413 American Literature to 1900

One of the following:

- EGL 3313 Medieval Literature
- EGL 3323 Renaissance Literature

One of the following:

- EGL 3343 Restoration and Eighteenth Century Literature
- EGL 3353 Nineteenth Century British Literature

5. One of the following Emphases (*Grades included in Teaching Field GPA*)—7 hours

A. Literature

- EGL 3341 Literary Magazine Practicum
- EGL 4483 Selected Topics: Literature—two of the following:  
1) Author 2) Period 3) Genre 4) Topic

B. Writing

- EGL 3321 Writing Center Practicum
- EGL 4473 Selected Topics: Creative Writing
- EGL 4473 Selected Topics: Creative Writing (2nd Topic)

## MATHEMATICS EDUCATION

1. University Core Curriculum—46 hours. (See page 69.)  
The Mathematics, Physical Science, and Social Science electives are covered by program requirements.
2. Other Required Courses  
Approved First Aid/CPR Course (age appropriate) before Internship  
COM 2523 Public Speaking
3. Professional Education—37 hours
  - ED 1114 Educational Foundations and Technology
  - ED 2113 Human Growth and Development
  - ED 2133 Educational Psychology
  - ED 2713 Education of the Exceptional Student
  - ED 3153 Reading in the Content Areas
  - ED 3183 Educational Assessment
  - ED 4673 Curriculum and Instruction: Secondary Mathematics
  - ED 4880 Internship: 7-12 Education
  - ED 4881 Seminar: 7-12 Education
4. Mathematics Teaching Field—41 hours
  - CS 1113 Introduction to Computing
  - GSC 4133 Faith and Science
  - MTH 1134 Calculus I
  - MTH 1144 Calculus II
  - MTH 2114 Linear Algebra and Differential Equations
  - MTH 2123 Vector Calculus
  - MTH 3103 Foundations of Mathematics



|          |                                 |
|----------|---------------------------------|
| MTH 3143 | Topics in Mathematics Education |
| MTH 3153 | Foundations of Geometry         |
| MTH 3183 | Probability and Statistics      |
| MTH 4101 | Readings                        |
| MTH 4123 | Abstract Algebra                |
| PHY 2114 | General Physics I               |

## MUSIC EDUCATION

See page 145.

## SOCIAL STUDIES EDUCATION

1. University Core Curriculum—40 hours. (See page 69.)  
HST 1013, 1023, POL 2113, and the Social Science and Global Studies electives are covered by program requirements.
2. Other Required Courses  
Approved First Aid/CPR Course (age appropriate) before Internship  
COM 2523 Public Speaking
3. Professional Education—37 hours  
ED 1114 Educational Foundations and Technology  
ED 2113 Human Growth and Development  
ED 2133 Educational Psychology  
ED 2713 Education of the Exceptional Student  
ED 3153 Reading in the Content Areas  
ED 3183 Educational Assessment  
ED 4693 Curriculum and Instruction: Secondary Social Studies  
ED 4880 Internship: 7-12 Education  
ED 4881 Seminar: 7-12 Education
4. Social Studies Teaching Field—51 hours  
ECN 2113 Principles of Microeconomics  
ECN 2123 Principles of Macroeconomics  
HST 1013 Western Civilization I  
HST 1023 Western Civilization II  
HST 2113 United States History to 1865  
HST 2123 United States History since 1865  
HST 2153 Twentieth Century World History  
HST 2413 Arkansas History  
POL 2113 American Government  
SST 1113 Introduction to Sociology  
SST 1133 Cultural Geography  
SST 1143 World Regional Geography  
SST 2123 Cultural Anthropology  
One of the following:  
HST 2243 Middle Ages  
HST 2323 Poverty and Welfare in American History  
HST 2523 Classical World  
HST 2533 Early Modern Europe

HST 3253 British Empire  
HST 3273 America at War, 1861-1919  
HST 3313 Second World War  
HST 3443 The Modern Middle East  
HST 3423 Leaders in History  
RPH 3333 History of Philosophy

One of the following:

HST 4613 Seminar in History  
POL 4613 Seminar in United States Politics

Two of the following:

POL 3003 Political Philosophy (covers Core Philosophy elective)  
POL 3353 International Relations  
POL 4243 Constitutional Law

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## PROGRAMS LEADING TO EARLY CHILDHOOD EDUCATION (Preschool-Grade 4)

### Requirements for Bachelor of Science in Education (B.S.E.) degree with major in Early Childhood Education

1. University Core Curriculum—43 hours (See page 69.)  
Social Science and Global Studies electives are covered by program requirements. EGL 4003 and the Mathematics elective are not required.
  - BBL 1013 Old Testament Survey
  - BBL 1023 New Testament Survey
  - BBL 3003 Evangelical Theology
  - BBL 4002 Capstone Seminar in Christian Life
  - BIO 1003 Biological Science
  - COR 1002 Gateway Seminar in Christian Scholarship
  - COR 1012 Wellness
  - COR 11\_1 Wellness Activity
  - ECN 2003 Basic Economics
  - EGL 1013 English I: Composition
  - EGL 1023 English II: Literary Analysis and Research
  - GSC 1023 Physical Science
  - HST 1013 Western Civilization I
  - HST 1023 Western Civilization II
  - POL 2113 American GovernmentPhilosophy—3 hours
2. Other Required Courses  
Approved First Aid/CPR Course (age appropriate) before Internship  
HST 2413 Arkansas History
3. Professional Education—53 hours
  - ED 1114 Educational Foundations and Technology
  - ED 2113 Human Growth and Development
  - ED 2133 Educational Psychology
  - ED 2713 Education of the Exceptional Student

## EDUCATION

- ED 3121 Educational Communications
  - ED 3161 Speech and Language Development of Young Children
  - ED 3183 Educational Assessment
  - ED 3353 Instructional Methods, 1-8
  - ED 3362 Curriculum and Instruction: Language Arts, P-8
  - ED 3373 Curriculum and Instruction: Reading I, P-4
  - ED 3383 Curriculum and Instruction: Arithmetic, P-8
  - ED 3393 Children and Adolescent Literature
  - ED 3763 Behavior Management
  - ED 4373 Curriculum and Instruction: Reading II
  - ED 4850 Internship: Early Childhood Education, P-4
  - ED 4851 Seminar: Early Childhood Education, P-4
4. Early Childhood Teaching Field—22 hours
- ED 3254 Fine Arts for Early Childhood Teachers
  - ED 3263 Foundations of Early Childhood Education and  
Preschool Field Experience
  - ED 3273 Curriculum and Instruction: Early Childhood Education
  - GSC 3103 Science for Elementary and Middle School Teachers
  - MTH 2143 Mathematical Structures I
  - MTH 2183 Mathematical Structures II
- One of the following:
- SST 1133 Cultural Geography
  - SST 1143 World Regional Geography
5. Endorsement/Emphasis:
- A. Completion of Endorsement in Teaching English to Speakers of  
Other Languages (TESOL).
    - ICS 2113 Intercultural Communications
    - EGL 3363 Advanced English Grammar
    - ED 3563 Second Language Acquisition for Teachers
    - ED 3583 Curriculum and Instruction: TESOL
  - B. Emphasis in Language Studies—12 hours of a modern language,  
as approved by Education adviser.
  - C. Emphasis in Fine Arts—12 additional hours in ART and/or MUS,  
as approved by Education adviser.
  - D. Completion of 5th and 6th grade Endorsement—12 hours
    - ED 4563 Curriculum and Instruction: Middle School
    - Remaining 9 hours with Education chair approval.

## EDUCATION MINOR

Students pursuing majors whose course work may serve as a content area for secondary teaching—including English, Mathematics, Sciences, Social Studies, and Spanish—are encouraged to complete an Education minor.

The minor does not qualify one for a teaching license but will provide practical training for those whose careers may be enhanced by the ability

to teach. The courses also establish a foundation of professional education credit, should the student wish to pursue licensure in the future.

### **Requirements for minor in Education**

The student must successfully complete a minimum of 18 hours.

Required Courses—18 hours

- ED 2113 Human Growth and Development
- ED 2133 Educational Psychology
- ED 2713 Education of the Exceptional Student
- ED 3153 Reading in the Content Areas
- ED 3183 Educational Assessment
- ED 4663/73/93 Curriculum and Instruction: Secondary course

As students progress through the Education courses, they will be required to fulfill each of the following:

1. Pass the JBU Praxis I tests in Reading, Writing, and Mathematics.
2. Pass field experience as specified within certain Education courses.
3. Pass modified Gates One, Two, and Three.
4. Pass the Praxis II Content tests before enrolling in ED 46\_3.

### **TESOL ENDORSEMENT**

For a teacher candidate to earn an endorsement in Teaching English to Speakers of Other Languages, the following courses are to be added to a B.S.E. program:

- ICS 2113 Intercultural Communications
- EGL3363 Advanced English Grammar
- ED 3563 Second Language Acquisition for Teachers
- ED 3583 Curriculum and Instruction

*DIVISION OF*  
**ENGINEERING AND  
CONSTRUCTION  
MANAGEMENT**

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*DIVISION OF*  
**ENGINEERING AND  
CONSTRUCTION MANAGEMENT**

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*Bland (chair), Caldwell, Holmes, Kim, Macfarlan, Norwood, Pearson, Setian*

The Division of Engineering and Construction Management comprises the Departments of Computer Science, Construction Management, and Engineering. Bachelor's degrees are offered in Construction Management and Engineering. Associate's degrees are offered in Construction Management and Electromechanical Technology. A minor is offered in Construction Management.

### **MISSION OF THE DIVISION**

The mission of the Division of Engineering and Construction Management is to provide a university education integrating general studies and disciplinary studies to equip students to excel in their chosen field of construction management or engineering.

The faculty of the division seeks to educate the student in the methods of carefully and logically understanding problems and of designing solutions for those problems. Education within the division is in the context that "All truth is God's truth"; therefore, a biblical world- and life-view is the basis for problem-solving procedures. "The fear of the Lord is the beginning of knowledge" (Proverbs 1:7). A low student-faculty ratio within the division assures interaction between faculty and students on these and other issues. The curriculum and the co-curriculum prepare the division graduate to function effectively in advanced technical positions or to enter graduate studies.

### **ACCREDITATION**

The Bachelor of Science in Engineering degree with electrical/computer, mechanical or renewable energy concentration is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410)347-7700, <http://www.abet.org>.

The Bachelor of Science in Construction Management degree is accredited by the American Council for Construction Education (ACCE), <http://www.acce-hq.org>, phone (210)495-6161.

## **FACILITIES**

The division facilities are in three buildings, providing 25,000 square feet. Laboratories occupy 10,000 square feet and shops 4,000 square feet. Laboratories support instruction and student design activities in thermal sciences, fluids, mechanical testing, machine design, materials science, instrumentation, control systems, electronics, communications, and opto-electronics. A welding shop, a machine shop, and a modeling shop provide support for student projects. The Construction Management Department has a construction staging area and office that is used for the integrated Senior Capstone course which manages the construction of a building each year.

## **ADVISORY BOARDS**

Advisory boards for both Construction Management and Engineering are made up of distinguished alumni and other professionals. These groups give counsel on curriculum focus, professional issues, and integration of faith and learning.

## **SCHOLARSHIPS**

Scholarships are available to upper-division construction management and engineering students. These are supported by the Fred Olney Endowed Engineering Scholarship, the Engineering Excellence Endowed Scholarship, the Harold C. and Mildred B. Ward Endowed Engineering Scholarship, the Charles Willis Endowed Scholarship, the Robert D. Nabholz Construction Scholarship, the Milton and Leila Levy Endowed Scholarship, the National Association of Women in Construction Scholarship, the American Society of Professional Estimators Endowed Scholarship, the Jeff Scholtens Memorial Endowed Scholarship, the Barnabas (An Encourager) Endowed Scholarship (Acts 4:36), the Engineering Opportunity Endowed Scholarship, and the Dennis Schumacher Engineering Scholarship.

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## **DEPARTMENT OF COMPUTER SCIENCE**

(SYMBOL: CS)

The Department of Computer Science offers support courses for students majoring in Engineering and Mathematics.

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## **DEPARTMENT OF CONSTRUCTION MANAGEMENT**

(SYMBOL: CM)

The mission of the John Brown University Construction Management Department is to produce graduates who have the knowledge, skills, and attributes needed for entry-level construction management positions and for



## ENGINEERING AND CONSTRUCTION MANAGEMENT

growth into positions of greater responsibility and leadership in the construction industry. The education is to be provided in a Christian context that promotes spiritual growth and the development of positive character traits such as honesty, reliability, and industriousness, which result in a high level of professionalism.

Construction Management students have access to over sixteen computer workstations in the department. These stations are equipped with software used for estimating, scheduling, 3D architectural design, structural design, and other construction applications. Computer applications are studied in lecture courses and are used in practicum courses on real projects. Practical experience is also given in the use of surveying equipment and applicable power tools. Seniors are given experience in managing an actual construction project on lots owned by JBU in a local housing development.

Graduates from this department are equipped to meet the demands of the construction industry. They are found managing the construction process in both the residential and commercial sector of the industry. This program is also suited for students interested in becoming Christian missionary builders and for students interested in Design-Build. This degree includes a minor in Business Administration.

John Brown University is a member of the Associated Schools of Construction, and is recognized by the Arkansas Chapter of the Associated General Contractors of America, Inc., the Arkansas Chapter of the Associated Builders and Contractors, and the American Institute of Constructors. The program is accredited by the American Council for Construction Education (ACCE), <http://www.acce-hq.org>, phone (210)495-6161.

### **National Certification Exam**

Graduating seniors are required to take the Associate Constructor Exam administered by the Constructor Certification Commission (CCC). The American Institute of Constructors (AIC) is the sponsoring organization and is the professional society for those working in the field of construction management.

### **Requirements for the Bachelor of Science (B.S.) degree with major in Construction Management**

1. University Core Curriculum—37 hours. See page 67.  
The Mathematics, Physical Science, and Social Science electives are covered by program requirements.  
EGL 4003, Biological Science, and Global Studies are not required.
2. Construction Management Major Field—72 hours

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- CHM 1014 Fundamentals of Chemistry
- CM 1112 Construction Techniques I
- CM 1122 Construction Techniques II
- CM 1223 Graphic Communication Skills
- CM 1313 Materials of Construction
- CM 2213 Construction Methods I
- CM 2223 Construction Methods II
- CM 2322 Statics and Strength for Technology
- CM 2431 Construction Internship A
- CM 2441 Construction Internship B
- CM 2513 Surveying
- CM 3213 Construction Safety and Quality
- CM 3233 Structural Systems for Building
- CM 3413 Estimating I
- CM 3603 Mechanical/Electrical Systems for Buildings
- CM 3613 Architectural Design I
- CM 3623 Architectural Design II
- CM 4323 Construction Contracting
- CM 4423 Estimating II
- CM 4613 Construction Project Planning and Scheduling
- CM 4713 Construction Management I
- CM 4723 Construction Management II
- COM 2523 Public Speaking
- MTH 1122 Trigonometry
- MTH 1123 Survey of Calculus
- PHY 1114 Fundamentals of Physics I

3. Enhanced Business Administration Minor Field—24 hours

- ATG 1163 Accounting for Decision Making
- BUS 2193 Business Statistics
- BUS 3153 Applied Business Ethics
- BUS 4143 Business Law
- ECN 2123 Principles of Macroeconomics
- LDR 3563 Organizational Behavior
- MGT 2173 Principles of Management

One of the following:

- BUS 2113 Financial Spreadsheet Applications
- BUS 2153 Financial Mathematics

Minimum total semester hours . . . . .133

## Possible Four-Year Plan for Bachelor's Degree

### Freshman Year - Fall

CM 1112 Construction Techniques I  
 CM 1313 Materials of Construction  
 COR 1002 Gateway Seminar Christian Scholarship  
 BBL 1013 Old Testament Survey  
 EGL 1013 English I: Composition  
 COR 1012 Wellness  
 15 hours

### Sophomore Year - Fall

CM 2213 Construction Methods I  
 CM 2513 Surveying  
 PHY 1114 Fundamentals of Physics I  
 BBL 1023 New Testament Survey  
 HST 1013 Western Civilization I  
 16 hours

### Summer

CM 2441 Construction Internship B

### Junior Year - Fall

CM 3413 Estimating I  
 CM 3603 Mech/Elec Systems for Buildings  
 CM 3613 Architectural Design I  
 BUS 2153 Financial Mathematics  
 POL 2113 American Government  
 15 hours

### Senior Year - Fall

CM 4613 Constr Project Planning and Scheduling  
 CM 4713 Construction Management I  
 BBL 3003 Evangelical Theology  
 BUS 4143 Business Law  
 BUS 3153 Applied Business Ethics  
3 Philosophy Elective  
 18 hours

### Freshman Year - Spring

CM 1122 Construction Techniques II  
 CM 1223 Graphic Communication Skills  
 ATG 1163 Accounting for Decision Making  
 CHM1014 Fundamentals of Chemistry  
 MTH 1122 Trigonometry  
 EGL 1023 English II: Litarary Analysis and Res.  
 17 hours

### Sophomore Year - Spring

CM 2223 Construction Methods II  
 CM 2322 Statics and Strength for Technology  
 CM 2431 Construction Internship A  
 COR 11\_1 Wellness Activity  
 MGT 2173 Principles of Management  
 HST 1023 Western Civilization II  
 MTH 1123 Survey of Calculus  
 16 hours

### Junior Year - Spring

CM 3213 Construction Safety and Quality  
 CM 3233 Structural Systems for Buildings  
 CM 3623 Architectural Design II  
 LDR 3563 Organizational Leadership  
 ECN 2123 Principles of Macroeconomics  
 COM 2523 Public Speaking  
 18 hours

### Senior Year - Spring

CM 4323 Construction Contracting  
 CM 4423 Estimating II  
 CM 4723 Construction Management II  
 BUS 2193 Business Statistics  
 BBL 4002 Capstone Senimar in Christian Life  
3 Arts Elective  
 17 hours

## Requirements for minor in Construction Management

The student must successfully complete a minimum of 19 hours.

Required Courses—19 hours

CM 1112 Construction Techniques I  
 CM 1122 Construction Techniques II  
 CM 1223 Graphic Communication Skills  
 CM 1313 Materials of Construction  
 CM 3413 Estimating I

One of the following:

CM 2213 Construction Methods I  
 CM 2223 Construction Methods II

One of the following:

CM 3213 Construction Safety and Quality  
 CM 3603 Mechanical/Electrical Systems for Buildings  
 CM 3613 Architectural Design I

**Requirements for the Associate of Science (A.S.) degree with major in Construction Management**

1. University Core Curriculum—26 hours
    - BBL 1013 Old Testament Survey
    - BBL 1023 New Testament Survey
    - COR 1002 Gateway Seminar in Christian Scholarship
    - COR 1012 Wellness
    - EGL 1013 English I
    - EGL 1023 English II
    - Core Elective Areas (See p. 67)
      - Wellness Activity—1 hour
      - Natural Science—3 hours
      - Social Science—3 hours
    - One of the following:
      - HST 1013 Western Civilization I
      - HST 1023 Western Civilization II
  2. Courses Specified by this Department—33 hours
    - ATG 1163 Accounting for Decision Making
    - BUS 2113 Financial Spreadsheet Applications
    - BUS 2193 Business Statistics
    - CM 1112 Construction Techniques I
    - CM 1122 Construction Techniques II
    - CM 1223 Graphic Communication Skills
    - CM 1313 Materials of Construction
    - CM 2431 Construction Internship A
    - CM 2441 Construction Internship B
    - CM 3413 Estimating I
    - One of the following:
      - CM 2213 Construction Methods I
      - CM 2223 Construction Methods II
    - Two of the following:
      - CM 3213 Construction Safety and Quality
      - CM 3603 Mechanical/Electrical Systems for Buildings
      - CM 3613 Architectural Design I
  3. Electives as necessary to complete minimum semester hours
- Minimum total semester hours . . . . .62

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**DEPARTMENT OF ENGINEERING**

(SYMBOLS: EE, EN, ME)

Engineers apply the theories and principles of science and mathematics to the economical solution of practical technical problems. There are some 25 different engineering specialties, but of the nearly 1.5 million engineering

## ENGINEERING AND CONSTRUCTION MANAGEMENT

jobs available each year the greatest numbers are filled by engineers having electrical or mechanical backgrounds. More than one half of engineering jobs are in the manufacturing industries. The major part of the remainder is in engineering and architectural services and business and management consulting services. Governments employ about 200,000 engineers.

Engineers in the electrical/computer and mechanical areas design, develop, test, and supervise the manufacture of electrical and electronic equipment, mechanical equipment, energy systems, and information systems.

### **Mission of the Department**

The Engineering Department strives to educate students in the application of science and technology to the service of God and humanity. The goal is to produce graduates who can begin effective engineering practice in industry, graduate school, or the mission field.

### **Program Educational Objectives**

The faculty of Engineering is committed to the following objectives which are consistent with both the university and the division mission statements and emphasize the head (intellectual), heart (spiritual), and hand (professional).

1. HEAD — John Brown University engineering graduates will have a strong general education, a broad foundation in electrical and mechanical fundamentals, and a depth of knowledge in a specific engineering discipline sufficient to ensure both immediate application and life-long learning.
2. HEART — John Brown University engineering graduates will be aware of their personal and professional responsibility to serve both God and humanity.
3. HAND — John Brown University engineering graduates will be prepared and confident to begin an entry-level engineering position, pursue graduate studies, or contribute as a Christian technical missionary.

### **Design Emphasis**

At JBU the engineering design experience starts in the freshman year, develops with more extensive technical content through the sophomore and junior years, and culminates with the two-semester senior design project. The scheme for the lower-level design courses is to introduce design methodology using small design projects that prepare the student to clearly define the problem, identify the constraints and criteria, and establish the requirements for the design. By the third year, the student will have developed the technical background to work out significant engineering design problems. The junior-level design lab provides an opportunity to

## JOHN BROWN UNIVERSITY

work with an interdisciplinary team and produce both oral and written presentations.

Fourth year experiences include those in electronic design, antenna design, machine design, and fluid system design as well as the capstone design project. The capstone project is an intense experience for the engineering student. It approaches a “real-world” situation. The projects must be finished and satisfy stated objectives as determined by active negotiation with the engineering faculty and the sponsors. Oral and written presentations are produced for this project.

### **Degree Candidacy**

Students must apply for degree candidacy status during the second semester of the sophomore year. At this time, the student will make known the concentration of choice and complete a four-year plan in consultation with their advisor.

### **Certification for Additional Concentration**

A student who completes all requirements for a B.S.Eng. degree with one concentration may receive an enhancement certification from the chair of the Division of Engineering and Construction Management certifying additional work done in a second concentration area by completing at least nine hours of additional course work from the second concentration’s required courses (this does not include electives).

A student who completes all the common requirements for a B.S.Eng., all the required courses from two concentrations, and four electives from those two concentrations may receive a B.S.Eng. degree with double concentration in those two areas.

### **Requirements for the Bachelor of Science in Engineering (B.S.Eng.) degree with Electrical/Computer, Mechanical, or Renewable Energy Concentration**

1. University Core Curriculum—34 hours. See page 67.  
The Mathematics, Physical Science, and Global Studies electives are covered by program requirements.  
EGL 4003, COR 1012, COR 11\_1, the Biological Science, and the Social Science electives are not required in this program.
2. Engineering Core—78 hours
  - CHM 1124 General Chemistry I
  - CS 1113 Introduction to Computing
  - EE 2213 Digital Electronics
  - EE 2223 Electrical Circuits

## ENGINEERING AND CONSTRUCTION MANAGEMENT

- EE 3313 Electronics I
  - EN 1112 Engineering Concepts and Design
  - EN 1122 Concepts in Electrical Engineering
  - EN 1222 Concepts in Mechanical Engineering
  - EN 2222 Instrumentation Lab
  - EN 2322 Engineering Economics
  - EN 3213 Engineering Materials Science
  - EN 3222 Design Lab
  - EN 3313 Engineering Fields
  - EN 3513 International Problem Solving in Engineering and  
Business
  - EN 4113 Engineering Design I
  - EN 4123 Engineering Design II
  - EN 4323 Control Systems
  - ME 3113 Thermal Sciences
  - ME 3313 Statics and Strength of Materials
  - MTH 1134 Calculus I
  - MTH 1144 Calculus II
  - MTH 2114 Linear Algebra and Differential Equations
  - MTH 2123 Vector Calculus
  - MTH 3183 Probability and Statistics
  - PHY 2114 General Physics I
  - PHY 2124 General Physics II
3. One of the following Concentrations—24 hours
- A. Electrical/Computer Concentration
    - CS 3213 Computer Architecture
    - EE 3323 Digital Systems
    - EE 3423 Signal Processing
    - EE 4123 Electromagnetics
    - EE 4413 Digital Communications Theory
  - Technical Electives—9 hours from the following:
    - EN 3501/02/03 Selected Topics
    - EN 4303 System Design with Microprocessors
    - EN 4403 Engineering Management
    - EN 4503 Electro-Optics
    - EE 3501/02/03 Selected Topics
    - EE 4203 Fiber Optic Communication
    - EE 4213 Electronics II
    - EE 4303 Digital Signal Processing
    - EE 4403 Advanced Digital Systems
    - EE 4503 Data and Computer Communications
    - EE 4703 Antennas
  - B. Mechanical Concentration
    - ME 3123 Dynamics
    - ME 3223 Thermodynamics
    - ME 4113 Machine Design

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- ME 4213 Heat Transfer
- ME 4323 Fluid Mechanics

Technical Electives—9 hours from the following:

- EN 3501/02/03 Selected Topics
- EN 4303 System Design with Microprocessors
- EN 4403 Engineering Management
- EN 4503 Electro-Optics
- ME 3501/02/03 Selected Topics
- ME 4103 Advanced Strength of Materials
- ME 4203 Mechanical Vibrations
- ME 4303 Finite Element Analysis
- ME 4403 Compressible Flow
- ME 4503 Viscous Flow
- ME 4603 Advanced Thermodynamics
- ME 4703 Aerospace Propulsion

C. Renewable Energy Concentration

- CHM 2154 General, Organic, and Biochemistry
- RE 1113 Introduction to Renewable Energies
- RE 2121 Practicum in Renewable Energy I
- RE 2131 Practicum in Renewable Energy II
- RE 3123 Bio-fuels and Biomass
- RE 3143 Wind Energy
- RE 3163 Solar Energy

Technical Electives—6 hours from the following:

- EE 4213 Electronics II
- EN 3501/02/03 Selected Topics
- EN 4403 Engineering Management
- ME 3123 Dynamic
- ME 3223 Thermodynamics
- ME 4103 Advanced Strength of Materials
- ME 4113 Machine Design
- ME 4203 Mechanical Vibrations
- ME 4213 Heat Transfer
- ME 4303 Finite Element Analysis
- ME 4323 Fluid Mechanics
- ME 4603 Advanced Thermodynamics

Minimum total semester hours . . . . .136



## ENGINEERING AND CONSTRUCTION MANAGEMENT

### Possible Four-Year Plan for Bachelor of Science in Engineering degree with Electrical/Computer Concentration

#### Freshman Year - Fall

EN 1112 Engineering Concepts and Design  
CHM1124 General Chemistry (L)  
MTH1134 Calculus I (L)  
COR 1002 Gateway Seminar in Christian  
Scholarship  
EGL 1013 English I: Composition  
15 hours

#### Sophomore Year - Fall

EE 2213 Digital Electronics (L)  
CS 1113 Introduction to Computing (L)  
MTH 2114 Linear Algebra and Differential Eq (L)  
PHY 2114 General Physics I (L)  
HST 1013 Western Civilization I  
17 hours

#### Junior Year - Fall

EE 3313 Electronics I (L)  
EN 3313 Engineering Fields (L)  
ME 3113 Thermal Sciences  
ME 3313 Statics and Strength of Materials  
BBL 3003 Evangelical Theology  
POL 2113 American Government  
18 hours

#### Senior Year - Fall

EN 4113 Engineering Design I  
EN 3213 Engineering Materials Science  
EE 4413 Digital Communications Theory (L)  
EE 3323 Digital Systems (L)  
EN 3513 Int'l Problem Solving in Eng. and Bus.  
3 Technical Elective  
18 hours

#### Freshman Year - Spring

EN 2322 Engineering Economics  
EN 1122 Concepts in Electrical Engineering  
EN 1222 Concepts in Mechanical Engineering  
MTH 1144 Calculus II (L)  
BBL 1013 Old Testament Survey  
EGL 1023 English II: Literary Analysis and Res.  
16 hours

#### Sophomore Year - Spring

EE 2223 Electrical Circuits  
EN 2222 Instrumentation Laboratory (L)  
PHY 2124 General Physics II (L)  
MTH 2123 Vector Calculus  
BBL 1023 New Testament Survey  
HST 1023 Western Civilization II  
18 hours

#### Junior Year - Spring

EN 3222 Design Lab (L)  
CS 3213 Computer Architecture  
EE 3423 Signal Processing (L)  
MTH 3183 Probability and Statistics  
3 Philosophy  
3 Technical Elective  
17 hours

#### Senior Year - Spring

EN 4123 Engineering Design II  
EN 4323 Control Systems  
EE 4123 Electromagnetics  
BBL 4002 Capstone Seminar in Christian Life  
3 Arts  
3 Technical Elective  
17 hours

JOHN BROWN UNIVERSITY

Possible Four-Year Plan for Bachelor of Science in Engineering degree with Mechanical Concentration

**Freshman Year - Fall**

EN 1112 Engineering Concepts and Design  
CHM1124 General Chemistry (L)  
MTH 1134 Calculus I (L)  
COR 1002 Gateway Seminar in Christian  
Scholarship  
EGL 1013 English I: Composition  
15 hours

**Sophomore Year - Fall**

EE 2213 Digital Electronics (L)  
CS 1113 Introduction to Computing (L)  
MTH 2114 Linear Algebra and Differential Eq (L)  
PHY 2114 General Physics I (L)  
HST 1013 Western Civilization I  
17 hours

**Junior Year - Fall**

EE 3313 Electronics I (L)  
EN 3313 Engineering Fields (L)  
ME 3113 Thermal Sciences  
ME 3313 Statics and Strength of Materials  
BBL 3003 Evangelical Theology  
POL 2113 American Government  
18 hours

**Senior Year - Fall**

EN 4113 Engineering Design I  
EN 3213 Engineering Materials Science  
ME 4113 Machine Design  
ME 4213 Heat Transfer  
EN 3513 Int'l Problem Solving in Eng. and Bus.  
3 Technical Elective  
18 hours

**Freshman Year - Spring**

EN 2322 Engineering Economics  
EN 1122 Concepts in Electrical Engineering  
EN 1222 Concepts in Mechanical Engineering  
MTH 1144 Calculus II (L)  
BBL 1013 Old Testament Survey  
EGL 1023 English II: Literary Analysis and Res.  
16 hours

**Sophomore Year - Spring**

EE 2223 Electrical Circuits  
EN 2222 Instrumentation Laboratory (L)  
PHY 2124 General Physics II (L)  
MTH 2123 Vector Calculus  
BBL 1023 New Testament Survey  
HST 1023 Western Civilization II  
18 hours

**Junior Year - Spring**

EN 3222 Design Lab (L)  
ME 3223 Thermodynamics  
ME 3123 Dynamics  
MTH 3183 Probability and Statistics  
3 Philosophy  
3 Technical Elective  
17 hours

**Senior Year - Spring**

EN 4123 Engineering Design II  
EN 4323 Control Systems  
ME 4323 Fluid Mechanics (L)  
BBL 4002 Capstone Seminar in Christian Life  
3 Arts  
3 Technical Elective  
17 hours

## ENGINEERING AND CONSTRUCTION MANAGEMENT

### Possible Four-Year Plan for Bachelor of Science in Engineering degree with Renewable Energy

#### Freshman Year - Fall

EN 1112 Engineering Concepts and Design  
 CHM1124 General Chemistry (L)  
 MTH1134 Calculus I (L)  
 COR 1002 Gateway Seminar in Christian  
 Scholarship  
 EGL 1013 English I: Composition  
 15 hours

#### Sophomore Year - Fall

EE 2213 Digital Electronics (L)  
 CS 1113 Introduction to Computing (L)  
 MTH 2114 Linear Algebra and Differential Eq (L)  
 PHY 2114 General Physics I (L)  
 HST 1013 Western Civilization I  
 17 hours

#### Junior Year - Fall

EE 3313 Electronics I (L)  
 EN 3313 Engineering Fields (L)  
 ME 3113 Thermal Sciences  
 ME 3313 Statics and Strength of Materials  
 RE 1113 Introduction to Renewable Energy  
 BBL 3003 Evangelical Theology  
 18 hours

#### Senior Year - Fall

EN 4113 Engineering Design I  
 EN 3213 Engineering Materials Science  
 RE 2121 Practicum in Renewable Energy I  
 RE 3123 Bio-fuels and Biomass  
 RE 3163 Solar Energy  
 EN 3513 Int'l Problem Solving in Eng. and Bus.  
 16 hours

#### Freshman Year - Spring

EN 2322 Engineering Economics  
 EN 1122 Concepts in Electrical Engineering  
 EN 1222 Concepts in Mechanical Engineering  
 MTH 1144 Calculus II (L)  
 BBL 1013 Old Testament Survey  
 EGL 1023 English II: Literary Analysis and Res.  
 16 hours

#### Sophomore Year - Spring

EE 2223 Electrical Circuits  
 EN 2222 Instrumentation Laboratory (L)  
 PHY 2124 General Physics II (L)  
 MTH 2123 Vector Calculus  
 BBL 1023 New Testament Survey  
 HST 1023 Western Civilization II  
 18 hours

#### Junior Year - Spring

EN 3222 Design Lab (L)  
 CHM 2154 General, Organic, and Biochemistry (L)  
 MTH 3183 Probability and Statistics  
 POL 2113 American Government  
 3 Philosophy  
 3 Technical Elective  
 18 hours

#### Senior Year - Spring

EN 4123 Engineering Design II  
 EN 4323 Control Systems  
 RE 2131 Practicum in Renewable Energy II  
 RE 3143 Wind Energy  
 BBL 4002 Capstone Seminar in Christian Life  
 3 Arts  
 3 Technical Elective  
 18 hours

**Requirements for the Associate of Science (A.S.) degree with major in Electromechanical Technology**

1. University Core Curriculum—23 hours
    - BBL 1013 Old Testament Survey
    - BBL 1023 New Testament Survey
    - COR 1002 Gateway Seminar in Christian Scholarship
    - COR 1012 Wellness
    - EGL 1013 English I
    - EGL 1023 English II
    - One of the following:
      - HST 1013 Western Civilization I
      - HST 1023 Western Civilization II
    - Core Elective Areas (See p. 67)
      - Wellness Activity—1 hour
      - Social Science—3 hours
  2. Courses Specified by this Department—33 hours
    - CHM 1124 General Chemistry I
    - CS 1113 Introduction to Computing
    - EN 1112 Engineering Concepts and Design
    - EN 1121 Production Technique Laboratory
    - EN 1122 Concepts in Electrical Engineering
    - EN 1222 Concepts in Mechanical Engineering
    - EN 2222 Instrumentation Lab
    - EN 2322 Engineering Economics
    - EN 3213 Engineering Materials Science
    - MTH 1134 Calculus I
    - PHY 2114 General Physics I
    - PHY 2124 General Physics II
  3. Electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .62

HUMANITIES AND SOCIAL SCIENCES

*DIVISION OF*  
**HUMANITIES  
AND SOCIAL SCIENCES**

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*DIVISION OF*  
**HUMANITIES  
AND SOCIAL SCIENCES**

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*Cater, Froman (chair), Guinn, A. Himes, J. Himes, Iglesias, D. Johnson, P. Jones, S. Jones, Kirk, R. Moore, Niles, C. Pastoor, J. Pastoor, Posey, Roby, Stratman*

The Division of Humanities and Social Sciences offers courses that are rich in the liberal arts and that contribute to the general education of all students. The division includes departments of English, History, Language Studies, Political Science, Psychology, and Social Studies. Curricula leading to teacher certification are offered in English and Social Studies. The division also houses the Pre-Law Professional Program.

## MISSION STATEMENT

The Division of Humanities and Social Sciences equips students to study human nature and the actions and ideas of people in their historical, political, and cultural contexts and to promote, from a distinctly Christian perspective, the intellectual, spiritual, and occupational development of our students. The faculty members in this division also contribute to our academic disciplines through research and publication which enriches the work of teaching that is our primary objective.

The Division of Humanities and Social Sciences develops students who

- \* know the theories, ideas, research methods, and key personalities of their discipline
- \* are willing to ask critical questions to evaluate and modify preconceptions
- \* will develop personal values based on observation, research, critical thinking, personal reflection, and Christian principles
- \* can propose thoughtful and expedient solutions to social problems
- \* appreciate the great tradition of arts and literature of the West while considering both the values of that tradition and the problems inherent in the canonization of tradition
- \* can communicate clearly in written and oral expression
- \* develop cross-cultural understanding in Western and non-Western traditions
- \* will be life-long learners and critical thinkers

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## DEPARTMENT OF ENGLISH

(SYMBOL: EGL)

The John Brown University Department of English offers a curriculum leading to the Bachelor of Arts and (in conjunction with the Division of Education) the Bachelor of Science in Education for teachers of English.

The curriculum for the English major emphasizes the reading and critical analysis of literature, the historical development of literature as part of culture, and the research, writing, critical thinking, and communication skills necessary for scholarship, effective teaching, and success in a wide variety of professional fields, which include publishing, editing, writing for business and industry, management, and many more.

Practicums offer experience in Writing Center consultation and experience in the production of a creative writing anthology.

### Requirements for the Bachelor of Arts (B.A.) degree with major in English

1. University Core Curriculum—52 hours. (See page 69.)  
EGL 4003 is covered by program requirements.
2. English Department Core—29 hours
  - EGL 2393 Advanced Composition
  - EGL 3313 Medieval Literature
  - EGL 3321 Writing Center Practicum
  - EGL 3333 Shakespearean Drama
  - EGL 3353 Nineteenth Century British Literature
  - EGL 3363 Advanced English Grammar
  - EGL 4111 Careers for English Majors
  - EGL 4413 American Literature to 1900
  - EGL 4453 Senior SeminarOne of the following:
  - EGL 2213 World Literature I
  - EGL 2223 World Literature IIOne of the following:
  - EGL 3323 Renaissance Literature
  - EGL 3343 Restoration and Eighteenth Century Literature
3. One of the following Emphases
  - A. Literature—10 hours
    - EGL 3341 Literary Magazine Practicum
    - EGL 3713 Literary Theory
    - EGL 4483 Selected Topics: Literature—in **two** of the following:
      - 1) Author
      - 2) Period
      - 3) Genre
      - 4) Topic



B. Writing—7 hours

- EGL 3321 Writing Center Practicum (may be repeated for additional credit)
- EGL 4473 Selected Topics: Creative Writing
- EGL 4473 Selected Topics: Creative Writing (2nd genre)

4. Foreign Language—12 hours in one language or six hours each in two languages. (Completion of an intermediate course covers the Global Studies component.) English majors are encouraged to consider Spanish or French as a minor.

5. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

**Requirements for minor in English**

The student must successfully complete a minimum of 21 hours of course work in English.

Six hours of upper-division courses must be completed.

**Requirements for minor in Teaching English to Speakers of Other Languages (TESOL)**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- ED 2133 Educational Psychology
- ED 3183 Educational Assessment
- ED 3563 Second Language Acquisition for Teachers
- EGL 3363 Advanced English Grammar
- EGL 3583 Curriculum and Instruction: TESOL
- ICS 2113 Intercultural Communications
- LS 3173 Introduction to Linguistics

**Requirements for the Bachelor of Science in Education (B.S.E.) degree with major in English**

See Division of Education, page 147.

**Requirements for minor in Education**

English majors whose professional plans may include teaching in public (grades 7-12 with a non-traditional licensure), private, international, or college settings are encouraged to consider the 18-hour Education minor. Though the minor is not recognized for teacher licensure, the package will provide a strong educational background for whatever teaching opportunities one may encounter. See the Division of Education, page 152.

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## DEPARTMENT OF HISTORY

(SYMBOL: HST)

The Department of History seeks bright, motivated young people who are interested in the world around them and who desire to work toward becoming reflective, thoughtful, and well-rounded Christians. Undergraduate study of history prepares students for graduate work in many fields, including theology, linguistics, and psychology. JBU's history department is especially equipped to assist students interested in pursuing careers in law, international relations, and politics. In addition to being a good thing in itself, learning about history complements all other courses of study. For this reason, the History Department offers courses within the Core Curriculum. Courses in this department also serve as a substantial component of the Social Studies curriculum as required for the B.S.E. degree.

### Requirements for the Bachelor of Arts (B.A.) degree with major in History

1. University Core Curriculum—55 hours. (See page 69.)
2. Courses Specified by this Department—36 hours
  - HST 2113 United States History to 1865
  - HST 2123 United States History since 1865
  - HST 2213 Study of History
  - HST 4613 Seminar in HistoryTwenty-four hours from the following:
  - BBL 3363 History of the Christian Church I
  - BBL 3373 History of the Christian Church II
  - HST 2153 Twentieth Century World History
  - HST 2243 Middle Ages
  - HST 2323 Poverty and Welfare in American History
  - HST 2523 Classical World
  - HST 3253 British Empire
  - HST 3263 American Slavery in Comparative Perspective
  - HST 3273 America at War, 1861-1919
  - HST 3313 Second World War
  - HST 3411/12/13 Selected Topics
  - HST 3423 Leaders in History
  - HST 3433 History of the Middle East, 600-1800
  - HST 3443 The Modern Middle East
  - HST 3463 African Civilization to 1850
  - HST 4511/12/13 Independent Study
  - POL 3143 The American Presidency
  - PSY 3383 History of Psychology
  - RPH 3333 History of Philosophy

- At least six hours must be upper-division courses.
3. Foreign Language—12 hours (or equivalent) in one or more languages. At least six hours must focus on a single language. (Completion of an intermediate language course covers the Global Studies elective.)
  4. Minor field and/or electives as necessary to complete minimum total hours. At least 12 hours must be upper-division courses.
- Minimum total semester hours . . . . .124

**Requirements for minor in History**

The student must successfully complete a minimum of 18 hours beyond the Core.

- Required Courses—6 hours
- HST 2113 United States History to 1865
- One of the following:
- HST 2123 United States History since 1865
  - HST 2153 Twentieth Century World History

A minimum of 12 additional hours in history.  
 At least six hours must be upper-division courses.

**U.S. History CLEP Examinations**

History majors and minors may not use CLEP examinations to substitute for HST 2113 or 2123 after matriculating at JBU.

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**DEPARTMENT OF LANGUAGE STUDIES**

(SYMBOL: LS)

The Department of Language Studies offers the Bachelor of Arts degree with a major in Spanish, and minors in French, Spanish, and Linguistics. Courses in other languages—Chinese, German, Japanese, Latin—are offered upon sufficient student interest. Language courses meet the needs of students in Bachelor of Arts programs throughout the university. The Language Studies Department designs and schedules its courses in cooperation with the Biblical Studies, English, History, Intercultural Studies, International Business, Music, and Political Science programs.

A hallmark of the program is the use of instructional technology for out-of-class practice and exposure to samples of actual language use. The department’s language facility provides software, videos, and feature films for language learning. Students go there to record pronunciation assignments or to watch the several foreign language television channels which are available on campus. The department has worked with instructional technology to make other resources, such as foreign language dictionaries, available on the campus computer network.

The Spanish major entails a semester of study in Seville, Spain. In order to be eligible to participate in Semester in Spain (Seville), students must successfully complete LS 3113 and 3123. LS 3173 or an equivalent course is strongly recommended. Students who do not perform well in these classes will probably not succeed in the program in Spain where all instruction is in Spanish.

Financial aid funds for Semester in Spain (Seville) may be limited based on student demand. Students interested in majoring in Spanish should consult with the department chair as early as possible about their future participation in Seville.

The relatively low number of hours required for the major, 37, facilitates double-majoring. Most students do so; those who do not typically complete two minors. Students who are interested in a teaching career should consider a minor in Education. See the Division of Education, page 152.

Students in other majors may earn credit in Spanish and specialized areas such as business and environmental studies by spending a semester in Costa Rica in the Latin American Studies Program sponsored by the Council for Christian Colleges & Universities.

College credit in language may be established by CLEP or other examinations approved by the department.

Based upon recommendation of the Department of Language Studies, a student may enter language study above the elementary level without having established college credit for the first course(s). In such cases, the early courses are waived upon completion of subsequent work. The waiver does not establish credit; hours are posted only for the specific courses completed. However, a language requirement is considered met upon completion of the highest course required.

Spanish majors, especially those considering graduate school, are urged to take at least six hours of another language.

## **Requirements for Bachelor of Arts (B.A.) degree with major in Spanish**

1. University Core Curriculum—52 hours. (See page 69.)

The Global Studies elective is covered by program requirements.

2. Courses Specified by the Department—21 hours

|    |      |                             |
|----|------|-----------------------------|
| LS | 2113 | Intermediate Spanish I      |
| LS | 2123 | Intermediate Spanish II     |
| LS | 3113 | Readings in Spanish I       |
| LS | 3123 | Readings in Spanish II      |
| LS | 3173 | Introduction to Linguistics |

## HUMANITIES AND SOCIAL SCIENCES

- LS 4163 Professional Spanish
  - One of the following (chosen in accordance with the student's professional goals):
    - LS 4143 Second Language Acquisition for Spanish Teachers
    - LS 4193 Language Internship
  - 3. Semester in Spain (Seville)—16 hours (recommended during the fall semester of the junior year)
    - LSS 3114 Spanish History and Civilization
    - LSS 3514 Advanced Spanish Grammar and Composition
    - Two of the following:
      - LSS 3044 Spanish Short Story
      - LSS 3064 History of Spanish Art
      - LSS 3554 Spanish Literature I
      - LSS 3564 Spanish Literature II
    - Other Semester in Spain (Seville) courses may be substituted only upon approval of the Department of Language Studies.
  - 4. Minor field
  - 5. Electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

### Requirements for minor in Spanish

The student must successfully complete a minimum of 18 hours.

Required Courses—18 hours

- LS 2113 Intermediate Spanish I
- LS 2123 Intermediate Spanish II
- LS 3113 Readings in Spanish I
- LS 3123 Readings in Spanish II
- LS 3173 Introduction to Linguistics
- LS 4163 Professional Spanish

### Requirements for minor in French

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- LS 1213 Elementary French I
- LS 1223 Elementary French II
- LS 2213 Intermediate French I
- LS 2223 Intermediate French II
- LS 3173 Introduction to Linguistics
- LS 3213 Readings in French I
- LS 3223 Readings in French II

## Requirements for minor in Linguistics

The student must successfully complete a minimum of 22 hours.

Required Courses—6 hours

EGL 3363 Advanced English Grammar

LS 3173 Introduction to Linguistics

Intermediate Language Study or Latin—6 hours

Summer Institute of Linguistics—10 semester hours minimum, offered through the University of North Dakota or Trinity Western University (Langley, British Columbia, Canada).

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## DEPARTMENT OF POLITICAL SCIENCE

(SYMBOL: POL)

The Department of Political Science offers courses leading to a major in Political Science. Minors are available in International Relations, Pre-Law and Political Science. The curriculum is international in scope, theoretically grounded, and academically rigorous. Courses within the department introduce students to the theory and practice of political science with particular emphasis on political philosophy, international relations, comparative politics, political behavior, and political institutions. At the same time, students are equipped with the skills necessary to excel in any post baccalaureate pursuit, including graduate school, law school, missions, or business.

Faculty in the department take seriously the integration of faith and learning. Students are encouraged to view themselves as active participants in the flow of history with a God-given mandate to serve others in the local community and the world. Graduates will be able to apply a Christian worldview to public life and integrate their faith with their chosen vocation.

## Requirements for the Bachelor of Arts (B.A.) degree with major in Political Science

1. University Core Curriculum—49 hours. (See page 69.)  
POL 2113 is included in major field requirements.  
The Philosophy elective is covered by POL 3003.
2. Courses Specified by this Department—36 hours  
HST 2123 United States History since 1865  
POL 2113 American Government  
POL 2213 Comparative Politics  
POL 2473 Methods of Political Analysis  
POL 3003 Political Philosophy

## HUMANITIES AND SOCIAL SCIENCES

- POL 3213 Faith and Politics
- POL 4613 Seminar in United States Politics
- Fifteen hours from the following:
  - POL 3123 The American Congress
  - POL 3133 Politics of Social Policy
  - POL 3143 The American Presidency
  - POL 3153 Political Parties and Democracy
  - POL 3353 International Relations
  - POL 4233 Elections and Voting Behavior
  - POL 4243 Constitutional Law
  - POL 4313 Christianity and the Legal Profession

At least 12 hours must be upper-division courses.

3. Foreign Language—12 hours (or equivalent) in one or two languages.  
(Completion of an intermediate language course covers the Global Studies elective.)
4. Minor field or electives as necessary to complete minimum total hours  
Minimum total semester hours . . . . .124

### **Requirements for minor in International Relations**

The student must successfully complete a minimum of 18 hours.

Required Courses—9 hours

- BUS 4243 International Law
- HST 2153 Twentieth Century World History
- POL 3353 International Relations

Nine hours from among the following:

- ECN 2043 Economies of the European Union
- ECN 2113 Principles of Microeconomics
- ECN 2123 Principles of Macroeconomics
- ECN 3203 Economic Development
- ECN 4103 International Economics
- HST 3253 British Empire
- ICS 4133 Intercultural Leadership Skills
- POL 2213 Comparative Politics
- SST 2123 Cultural Anthropology

### **Requirements for minor in Pre-Law**

The student must successfully complete a minimum of 21 hours.

Required Courses—21 hours

- BUS 2153 Financial Mathematics
- EGL 2393 Advanced Composition
- POL 2113 American Government
- POL 4243 Constitutional Law

- POL 4313 Christianity and the Legal Profession  
Two of the following:  
BUS 4143 Business Law  
BUS 4243 International Law  
COM 4293 Communication Law and Ethics  
FAM 4453 Family Law and Society

### **Requirements for minor in Political Science**

The student must successfully complete a minimum of 21 hours.

Required Courses—12 hours

- HST 2123 United States History since 1865  
POL 2113 American Government  
POL 2213 Comparative Politics  
POL 3003 Political Philosophy

A minimum of nine additional hours in political science.

At least six hours must be upper-division courses.

### **American Studies Program (ASP) Option**

Students successfully participating in the four-month internship/seminar program in Washington, D.C., may fulfill the requirements of the Political Science minor by the additional completion of POL 2113 and 3003. Consult Political Science faculty for details.

## **PREPARATION FOR LAW SCHOOL**

Current trends highlight the fact that law schools are not looking for Pre-Law majors but, instead, for students who have successfully completed a rigorous liberal arts program and who can perform well on the LSAT. The purpose of the JBU Pre-Law Professional Program is to assist students of all majors in developing the skills and knowledge necessary for active intellectual engagement in the first year of law school. The program also seeks to assist students as they explore their interest in the legal profession and the possible avenues in which those interests might best apply. To meet these goals, the Pre-Law Professional Program consists of the following components:

- > the Pre-Law minor (listed under Political Science), which can be taken in conjunction with the degree of the student's choice, as a way to develop the verbal, written, and analytical skills necessary for law school;
- > the advice and guidance of the Pre-Law advisor who is both professor and lawyer;
- > an annual fall semester Pre-Law information session;
- > an annual spring semester mock LSAT test and score analysis;



- > an introduction to the integration of faith and the practice of law in JBU's Christianity and the Legal Profession course;
- > exposure to the law through JBU's Constitutional Law, Communication Law, Family Law, and/or Business Law courses;
- > exposure to legal professionals currently working in a variety of fields through JBU's Family Law and Society course and Christianity and the Legal Profession course;
- > the opportunity for competitive admissions and scholarships for The Law, Justice, and Culture Institute, a two-week May-term course at Trinity Christian College for undergraduate students interested in law school. The course consists of legal study and analysis, guest speakers who are lawyers in a variety of fields, and a day trip to the University of Chicago School of Law where students meet with law school personnel and sit in on a first-year law class.

Students interested in the Pre-Law Professional Program should contact the administrative assistant for the Division of Humanities and Social Sciences.

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## DEPARTMENT OF PSYCHOLOGY

(SYMBOL: PSY)

The Department of Psychology offers courses designed to introduce students to the empirical study of behavior and mental processes from the perspective of both natural revelation (scientific investigation) and special revelation (scriptural principles).

Reflecting the three-fold mission of John Brown University, psychology students are given training in Head (the basic principles and theories of psychology), Heart (the integration of a Christian worldview with psychology), and Hand (practical training and experience in psychology through supervised field experiences). The department also serves students in the Core Curriculum by offering courses that fulfill Core electives in both Mathematics and Social Science.

Psychology students are prepared both for graduate training in psychology or related fields and for service in a variety of church and social work or mental health agencies, working under supervisors with advanced graduate training. Psychology faculty mentors provide students with advice and assistance in the transition to graduate study or employment. Graduates from the department have been successful in gaining entry to graduate schools in psychology and social work as well as law school. Employment as a psychologist or licensed counselor will require further graduate study in psychology or social work but the psychology baccalaureate degree is valued by employers for providing an excellent liberal arts foundation for careers in

business, church work, welfare work, or any other area where an understanding of the human mind and interpersonal relationships may be beneficial.

## Requirements for the Bachelor of Science (B.S.) degree with major in Psychology

1. University Core Curriculum—49 hours. (See page 69.)  
The Mathematics and Social Science electives are covered by program requirements.
2. Courses Specified by this Department—40 hours
  - PSY 1013 Introductory Psychology
  - PSY 1101 Orientation to Psychology
  - PSY 2383 Introductory Statistics
  - PSY 2393 Research Methods
  - PSY 3203 Psychological Testing
  - PSY 3383 History of Psychology
  - PSY 4453 Research Seminar
  - PSY 4493 Seminar in PsychologyTwo of the following:
  - PSY 4333 Cognitive Psychology
  - PSY 4343 Theories of Learning
  - PSY 4353 Behavioral NeuroscienceTwo of the following:
  - PSY 2203 Theories of Personality
  - PSY 2413 Developmental Psychology
  - PSY 3423 Social PsychologyTwo of the following:
  - PSY 2233 Theories of Counseling
  - PSY 2243 Introduction to Therapeutic Interviewing
  - PSY 4213 Abnormal Psychology
3. Minor Field courses, or students may complete the following Concentration in Family and Human Services as an alternative to completing a minor:
  - FAM 2133 Introduction to Family Science
  - FAM 3133 Marriage and Family Living
  - FAM 3243 Family Sexuality
  - FAM 4253 Family Communication
4. Electives sufficient to complete minimum semester hours. *Students who anticipate attending graduate school should consider taking at least some of the following courses*
  - BIO 3514 Human Anatomy
  - BIO 3524 Animal Physiology

- COM 2523 Public Speaking
- EGL 2393 Advanced Composition

5. Achievement Test—All psychology majors are required to complete a standardized achievement test designated by the department.

Minimum total semester hours . . . . .124

**Requirements for minor in Psychology**

The student must successfully complete a minimum of 18 hours.

Required Courses—9 hours

- PSY 1013 Introductory Psychology
- PSY 2383 Introductory Statistics
- PSY 2393 Research Methods

An additional nine hours selected from PSY.

At least six hours must be upper-division courses.

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**DEPARTMENT OF SOCIAL STUDIES**  
(SYMBOL: SST)

The Department of Social Studies provides supporting courses to programs in Education and Intercultural Studies. Courses within the department are designed to encourage students to develop a global perspective on the modern world, including the individual and society, structures of power, and social institutions. Courses are designed to give students a greater appreciation for the effects of geographical factors on cultures, economics, and politics and the effects of cultural factors on human relations—factors such as language, economics, kinship, marriage, gender, social control, social stratification, religion, and art.

In conjunction with the Division of Education, the Division of Humanities and Social Sciences offers the Bachelor of Science in Education degree with a major in Social Studies. The Teaching Field consists of courses from four departments—Economics, History, Political Science, and Social Studies—and prepares the prospective secondary teacher for multifaceted responsibilities in the classroom. The minor in Social Studies also draws course work from diverse fields.

**Requirements for the Bachelor of Science in Education (B.S.E.) degree with major in Social Studies**

See Division of Education, page 149.

### **Requirements for minor in Social Studies**

The student must successfully complete a minimum of 21 hours.

Required Courses—15 hours including six hours of History and six hours each from any two additional departments among Economics, Intercultural Studies, Social Studies, and Political Science.

At least six hours must be upper -division courses.

*DIVISION OF*  
**INTERDISCIPLINARY  
STUDIES**

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*DIVISION OF*

# INTERDISCIPLINARY STUDIES

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*J. Beers (Gateway Coordinator) Confer, Gambill, B. Lambert, Norwood (chair), Whitmore*

The Division of Interdisciplinary Studies offers Bachelor of Science or Bachelor of Arts degrees in Interdisciplinary Studies, an Associate of Arts degree in General Education or Interdisciplinary Studies, and a minor in Military Science. It houses the Gateway Seminar in Christian Scholarship, the Core Curriculum wellness courses, certain Honors Scholars courses, and courses relating to learning assistance and career planning.

The division is also responsible for the academic advising of all students who have not declared a major. These students receive individual counseling by the General Academic Advisor and the Career Development Director who guide the student in a career exploration process.

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## DEPARTMENT OF INTERDISCIPLINARY STUDIES

(SYMBOL: IDS)

### **Requirements for the Bachelor of Arts (B.A.), Bachelor of Science (B.S.), or Associate of Arts (A.A) degree with major in Interdisciplinary Studies**

In special circumstances, a student wishing to pursue a course of study not available within the stated offerings of John Brown University may present a petition to the Dean of Undergraduate Studies, requesting approval of an individualized program leading to a baccalaureate or associate's degree in Interdisciplinary Studies. Such a program should be thoughtfully designed in consultation with a faculty advisor after the student has had significant college experience. Therefore, a student should not begin the proposal process prior to the second semester of the sophomore year.

Baccalaureate Interdisciplinary Studies Programs must conform to general university degree requirements, including the following:

- > Full Core Curriculum, possibly employing substitutions allowed within existing degrees. (See page 69.)
- > For B.A. programs, major field consisting of at least 36 semester hours and 12 hours of foreign language;

## JOHN BROWN UNIVERSITY

- > For B.S. programs, major field consisting of at least 48 semester hours;
- > At least 18 hours of upper-division courses included in the major field, with no presumption of waiver of specified prerequisites;
- > Stated minimums for major, minor, and cumulative grade-point averages;
- > Minimum total credit of 124 semester hours;

Associate's Interdisciplinary Studies Programs must conform to general university two-year degree requirements, including the following:

- > Full 28-hour Core Curriculum as stated for associate's degrees, possibly employing existing exceptions;
- > Major field consisting of at least 27 semester hours;
- > Bachelor's degree students seeking a tandem associate's degree must propose at least 18 unique hours in the associate's major field;
- > Stated residency requirements;
- > Stated minimums for major, minor, and cumulative grade-point averages;
- > Minimum total credit of 62 semester hours.

A student considering an Interdisciplinary Studies degree should begin discussion with the General Academic Advisor toward the establishment of a Faculty Advisory Committee (FAC) to supervise the degree project. The FAC consists of two or three faculty members representing the academic divisions where substantial proportions of the desired courses are offered. FAC members offer guidance as the student initiates and navigates the process: defining/refining personal goals, designing a coherent program that is professionally relevant and academically valid, and completing the requirements as approved for the degree. The student must submit to the dean of undergraduate studies a detailed proposal that includes the following:

- > Rationale for the desired major, including the student's personal aims;
- > Documentation of any similar curricula offered by other accredited institutions;
- > If the program is to form a foundation for advanced study, a statement of potential acceptability from a graduate institution to which the student may eventually apply;
- > Specific course plan arranged in accordance with scheduled offerings stated in the catalog;



- > Current transcript showing a minimum grade-point average of 2.8;
- > Signatures of members of the Advisory Committee.

Final approval of proposals for Interdisciplinary Studies is granted by the Undergraduate Council.

**Requirements for the Associate of Arts (A.A.) degree with major in General Education**

1. University Core Curriculum for A.A. degrees—28 hours. (See page 77.)
  2. Courses Specified by the Division—21 hours
    - BBL 3003 Evangelical Theology
    - BBL 4002 Capstone Seminar in Christian Life
    - COR 11\_1 Wellness Activity
    - EGL 4003 Masterpieces of Literature
    - POL 2113 American Government
    - Core Electives (See page 69.)
      - Natural Science—3 additional hours
      - The Arts—3 hours
      - Philosophy—3 hours
  3. Electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . . .62

*The Associate of Arts degree in General Education is not available to students pursuing four-year degrees.*

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**DEPARTMENT OF MILITARY SCIENCE**  
(SYMBOLS: ARO, MSC)

**B**y crosstown agreement with the University of Arkansas-Fayetteville, students at John Brown University may participate in the Reserve Officer Training Corps (ROTC) programs of the United States Army and the United States Air Force. Refer to pages 34-36 for full descriptions of the opportunities available.

**Requirements for minor in Military Science**

Completion of a full ROTC program consisting of at least 18 semester hours, including six upper-division courses.



*DIVISION OF*  
**NATURAL SCIENCE**

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## *DIVISION OF* **NATURAL SCIENCE**

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*Beers, Blume, Bowden, Eichelberger, Funk, Greuel, Main, Newton, Piston (chair), Siemens, Swearingen, Vega, Wakefield, Walker*

The Division of Natural Science, consisting of the Departments of Biology, Chemistry, General Science, Kinesiology, Mathematics, Physics, and Renewable Energy is equipped to give students excellent general knowledge of the indicated fields. Majors are offered in Biochemistry, Biology, Chemistry, Environmental Science, Exercise Studies, Mathematics, Renewable Energy, and Sports Medicine; a minor field may be elected in any of the departments. Degrees that prepare students for professional careers are available as well. These include a Teacher Education Program in Mathematics, and pre-professional programs leading to occupations in health fields, scientific research, and college teaching.

Students with high achievement are encouraged to consider graduate study. The division offers Core Curriculum courses that provide a breadth of practical scientific knowledge to students throughout the university. In each area of the curricula, the Division desires to provide an understanding of the natural world which can help our students to become established as Christian thinkers, prepared for God-honoring careers and service.

### **PREPARATION FOR MEDICAL SCHOOL AND OTHER PROFESSIONAL STUDY**

“Pre-medicine” is not a major at John Brown University. At most institutions of higher learning, a curriculum termed “pre-medicine” means simply that a student is meeting requirements for admission to medical school, and therefore, in addition to working toward a baccalaureate degree in some discipline, the student is satisfying these specific requirements. JBU has a Pre-Health Professions Program (PHPP) for students preparing for training as a physician, dentist, optometrist, veterinarian, or a career in one of the allied health professions, such as physician assistant, physical therapist, and occupational therapist, among others. While students in any major may participate in the PHPP, majors in Biology, Chemistry, or Biochemistry provide particularly good preparation for careers in health professions. All students in the PHPP must fulfill certain requirements in the natural sciences (biology, chemistry, physics, and mathematics), communication skills, and courses from the social sciences and humanities, under the guidance of the Health Professions Advisory Committee. More information is available in the Natural Science Division Student Handbook.

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## DEPARTMENT OF BIOLOGY

(SYMBOL: BIO)

The Department of Biology offers courses designed to give the student a broad foundation in the principles of biology and a familiarity with current problems in specific subdisciplines of biology. The approach taken by the department is to explore a Christian interpretation of the scientific facts and theories of life processes, emphasizing the harmony of such theories with a biblically-based worldview.

The Biology Department, in cooperation with the Chemistry Department, offers pre-professional training for students interested in a career as a dentist, physician, medical technologist, nurse, optometrist, pharmacist, physical therapist, occupational therapist, physician assistant, public health worker, and veterinarian. Graduates of the Biology Department may look forward to careers in a number of fields including teaching, research, bioethics, biotechnology, field biology/naturalist area, camp and recreation, missions, and government service. The curriculum includes courses normally required for admission to graduate schools. Any of the degree options can be combined with a minor in Education to prepare for alternative secondary teaching certification.

### Requirements for the Bachelor of Science (B.S.) degree with major in Biology

1. University Core Curriculum—46 hours. (See page 69.)  
The Mathematics and Natural Science electives are covered by program requirements.
2. Courses Specified by this Department
  - A. Biology Major Core—29 hours
    - BIO 1124 Cell Biology
    - BIO 1134 Plant Biology
    - BIO 2134 Animal Biology
    - CHM 1124 General Chemistry I
    - CHM 1134 General Chemistry II
    - MTH 1123 Survey of Calculus
    - MTH 2103 Statistics with Computer Applications
  - One of the following:
    - BIO 4103 Bioethics
    - GSC 4133 Faith and Science
  - B. One of the following options:
    - 1) Pre-professional Option—45 hours (*preparation for graduate school or training as a physician, dentist, veterinarian, or optometrist*)
      - BIO 2174 Genetics
      - CHM 3134 Organic Chemistry I

- CHM 3144 Organic Chemistry II
- PHY 1114 Fundamentals of Physics I
- PHY 1124 Fundamentals of Physics II

One hour of internship or research from the following:

- BIO 3101 Biology Teaching Practicum
- BIO 4221 Biological Research (or equivalent)
- BIO 3301 Field Experience (required of all students in the Pre-Health Professions Program)
- BIO 3301 Field Experience

An additional 24 hours of Biology, which may include CHM 3164 and as many as nine hours of research (BIO 4222 or 4223).

2) Allied Health Option—41 hours (*preparation for training as a physical therapist, occupational therapist, physician assistant, public health worker, nurse, etc.*)

- BIO 3301 Field Experience (or equivalent)
- BIO 3334 Microbiology
- BIO 3514 Human Anatomy
- BIO 3524 Animal Physiology

An additional eight hours of Biology, which may include CHM 3164 and as many as eight hours of research (BIO 4222, 4223).

An additional 20 hours of courses, as approved by the health profession advisor, to fulfill specific requirements for admission to an allied health program. Courses may be selected in areas such as nutrition, psychology, chemistry, physics, biomechanics, and exercise physiology.

3) Field Biology/Naturalist Option—27 hours (*preparation for field and taxonomic areas, environmental education and policy, government and park services, camp and recreation, missions, etc.*)

- BIO 3114 Ecology
- BIO 3164 Marine Biology

8 hours in an off-campus Field Biology/Environmental Program pre-approved by the department.

An additional eight hours of Biology courses as approved by the advisor

One of the following:

- GSC 1033 Astronomy
- GSC 1143 Earth Science

3. Complete a standardized achievement test designated by the department.
4. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . .124

### Requirements for minor in Biology

The student must successfully complete a minimum of 20 hours.

At least six hours must be upper-division courses.

## Minor in Education

Students interested in teaching should complete a minor in Education.  
See Division of Education, page 152.

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## DEPARTMENT OF CHEMISTRY

(SYMBOL: CHM)

The science of chemistry deals with the composition and changes of matter. The Department of Chemistry offers courses in which students study fundamental principles that provide a strong basis for understanding the physical world and provide opportunity to develop laboratory skills.

Chemistry courses address such topics as theories of atomic and molecular structure and the nature of chemical reactions. Courses are specifically designed to provide a foundational knowledge of chemistry necessary for understanding biological processes, to help students develop a scientific attitude, to give practice in the experimental method, to provide training in laboratory techniques, to enable the student to acquire the chemical background necessary for certain specialized professions and vocational fields, and to acquaint students with the chemical aspects of our environment and our civilization. A degree in Chemistry with a minor in Education will prepare students for alternative secondary teaching certification.

### Requirements for the Bachelor of Science (B.S.) degree with major in Chemistry

1. University Core Curriculum—49 hours. (See page 69.)  
The Mathematics and Physical Science electives are covered by program requirements.
2. Courses Specified by this Department—58 hours
  - CHM 1124 General Chemistry I
  - CHM 1134 General Chemistry II
  - CHM 3114 Advanced Analytical Chemistry
  - CHM 3134 Organic Chemistry I
  - CHM 3144 Organic Chemistry II
  - CHM 3183 Inorganic Chemistry
  - CHM 4124 Physical Chemistry I
  - CHM 4134 Physical Chemistry II
  - GSC 4133 Faith and Science
  - MTH 1134 Calculus I
  - MTH 1144 Calculus II
  - MTH 2103 Statistics with Computer Applications
  - PHY 2114 General Physics I
  - PHY 2124 General Physics II



Five hours from the following (three hours maximum in research):

- CHM 1101 Chemistry Practicum: Glassblowing
- CHM 2151 Seminar: Nanotechnology
- CHM 3101 Chemistry Practicum: Teaching
- CHM 3164 Biochemistry
- CHM 4221/22/23 Chemistry Research

3. Complete a standardized achievement test designated by the department.
4. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

**Requirements for the Bachelor of Science (B.S.) degree with major in Biochemistry**

1. University Core Curriculum—46 hours. (See page 69.)  
The Mathematics and Natural Science electives are covered by program requirements.

2. Courses Specified by this Department—77 hours

- BIO 1124 Cell Biology
- BIO 2174 Genetics
- BIO 3174 Molecular Cell Biology
- CHM 1124 General Chemistry I
- CHM 1134 General Chemistry II
- CHM 3114 Advanced Analytical Chemistry
- CHM 3134 Organic Chemistry I
- CHM 3144 Organic Chemistry II
- CHM 3164 Biochemistry
- CHM 3183 Inorganic Chemistry
- CHM 4124 Physical Chemistry I
- CHM 4134 Physical Chemistry II
- MTH 1134 Calculus I
- MTH 1144 Calculus I
- MTH 2103 Statistics with Computer Applications
- PHY 2114 General Physics I
- PHY 2124 General Physics II

One of the following:

- BIO 4103 Bioethics
- GSC 4133 Faith and Science

Eight hours from the following (including no more than four hours of research):

- BIO 3184 Developmental Biology
- BIO 3334 Microbiology
- BIO 3514 Human Anatomy
- BIO 3524 Animal Physiology
- BIO 4221/22/23/24 Biological Research

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CHM 2151 Seminar: Nanotechnology  
CHM 4221/22/23 Chemistry Research

3. Complete a standardized achievement test designated by the department.
4. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

### Requirements for minor in Chemistry

The student must successfully complete a minimum of 20 hours.

Twenty hours selected from the following:

CHM 1124 General Chemistry I  
CHM 1134 General Chemistry II  
CHM 3114 Advanced Analytical Chemistry  
CHM 3134 Organic Chemistry I  
CHM 3144 Organic Chemistry II  
CMM 3164 Biochemistry  
CHM 3183 Inorganic Chemistry

### Minor in Education

Students interested in teaching should complete a minor in Education.

See Division of Education, page 152.

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## DEPARTMENT OF GENERAL SCIENCE

(SYMBOL: GSC)

### Requirements for the Bachelor of Science (B.S.) degree with major in Environmental Science

1. University Core Curriculum—46 hours. (See page 69.)  
The Mathematics and Natural Science electives are covered by program requirements.
2. Courses Specified by this Department—64 hours
  - BIO 1124 Cell Biology
  - BIO 1134 Plant Biology
  - BIO 2134 Animal Biology
  - BIO 3114 Ecology
  - BIO 3334 Microbiology
  - BIO 4124 Selected Topic (as advised)
  - CHM 1124 General Chemistry I
  - CHM 1134 General Chemistry II
  - CHM 3114 Advanced Analytical Chemistry
  - CHM 3134 Organic Chemistry I

- CHM 3144 Organic Chemistry II
- GSC 1143 Earth Science
- GSC 4133 Faith and Science
- MTH 1123 Survey of Calculus
- MTH 2103 Statistics with Computer Applications
- 8 hours in off-campus Field Biology/Environmental program pre-approved by the department.

- 3. Electives sufficient to complete minimum semester hours.  
Minimum total semester hours . . . . .124

**Requirements for minor in General Science**

The student must successfully complete a minimum of 18 hours.

Required courses—18 hours taken in at least two of the following departments: biology, chemistry, physics, and general science (excluding GSC 3103).

At least eight hours must be upper-division courses.

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**DEPARTMENT OF KINESIOLOGY**  
(SYMBOL: KIN)

The Department of Kinesiology offers the Bachelor of Science degree with major in Sports Medicine and the Bachelor of Science degree with major in Exercise Studies. The baccalaureate curriculum in Sports Medicine leads to entry into graduate allied health professions programs such as athletic training or physical therapy as well as graduate studies in other related fields such as exercise physiology, sports health, and sports psychology. The curriculum for Exercise Studies prepares students to conduct individual exercise programs and fitness testing. This program also meets the requirements to sit for the ACSM (American College of Sports Medicine/Fitness Instructor Certification) and/or the NSCA (National Strength and Conditioning Association) NSCA-CPT.

**Requirements for the Bachelor of Science (B.S.) degree with major in Sports Medicine**

- 1. University Core Curriculum—46 hours. (See page 69.)  
Social Science—PSY 1013 needed as prerequisite for PSY 2383 and 2413. The Mathematics and Natural Science electives are covered by program requirements.
- 2. Courses Specified by this Department—70-75 hours
  - BIO 1124 Cell Biology
  - BIO 3514 Human Anatomy
  - BIO 3524 Animal Physiology
  - CHM 1124 General Chemistry I

- CHM 1134 General Chemistry II
  - KIN 1103 First Aid and CPR
  - KIN 1283 Athletic Training Techniques
  - KIN 2181 Medical Terminology
  - KIN 2242 Drugs in Society
  - KIN 2283 Injury Evaluation and Rehabilitation
  - KIN 3303 Nutrition for Fitness and Sport
  - KIN 3483 Therapeutic Exercises and Modalities
  - KIN 4423 Biomechanics
  - KIN 4433 Exercise Physiology
  - KIN 4496 Internship
  - MGT 3323 Management in Health and Sport
  - MTH 1113 College Algebra (*waived by ACT Math score of 24 or SAT Math score of 600*)
  - MTH 1122 Trigonometry (*waived by ACT Math score of 24 or SAT Math score of 600, and B or better in high school Trigonometry*)
  - PHY 1114 Fundamentals of Physics I
  - PHY 1124 Fundamentals of Physics II
  - PSY 2383 Introductory Statistics
  - PSY 2413 Developmental Psychology
- One of the following:
- BIO 4103 Bioethics
  - GSC 4133 Faith and Science

3. Electives as necessary to complete minimum semester hours

Minimum total semester hours . . . . . 124

**Requirements for the Bachelor of Science degree with major in Exercise Studies**

1. University Core Curriculum—51 hours. (See page 69.)  
The Biological Science and Wellness Activity electives are covered by program requirements.
2. Courses Specified by this Department—48 hours
  - BIO 1124 Cell Biology
  - BIO 3514 Human Anatomy
  - BIO 3524 Animal Physiology
  - COM 2523 Public Speaking
  - COR 1181 Aerobic Walking/Jogging
  - COR 1191 Nautilus and Free Weight Training
  - KIN 1103 First Aid and CPR
  - KIN 1283 Athletic Training Techniques
  - KIN 1381 Field Experience
  - KIN 1481 Field Experience
  - KIN 2242 Drugs in Society

- KIN 3303 Nutrition for Fitness and Sport
- KIN 3353 Theory and Techniques of Coaching
- KIN 3392 Personal Training Course
- KIN 4423 Biomechanics
- KIN 4433 Exercise Physiology
- KIN 4494 Internship
- MGT 3323 Management in Health and Sport

3. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . . 124

### Requirements for minor in Kinesiology

The student must successfully complete a minimum of 19 hours.

Required courses—19 hours

- KIN 1103 First Aid and CPR
- KIN 1283 Athletic Training Techniques
- KIN 3392 Personal Training Course

An additional eleven hours from among the following:

- COR 2233 Lifeguarding
- KIN 2181 Medical Terminology
- KIN 2242 Drugs in Society
- KIN 2283 Injury Evaluation and Rehabilitation
- KIN 3303 Nutrition for Fitness and Sport
- KIN 3353 Theory and Techniques of Coaching
- KIN 3483 Therapeutic Exercise and Modalities
- KIN 4423 Biomechanics
- KIN 4433 Exercise Physiology
- KIN 4492 Internship
- MGT 3323 Management in Health and Sport

At least six hours must be upper-division courses.

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## DEPARTMENT OF MATHEMATICS

(SYMBOL: MTH)

The Department of Mathematics offers courses which provide a solid foundation in the mathematical sciences consistent with a Christian worldview. The curriculum is designed to provide the Mathematics major with the knowledge and skills necessary to enter a career in teaching, insurance and finance, industry, or to continue into graduate school. The department also offers Core Curriculum courses and support courses for students majoring in engineering, chemistry, biology, business, elementary education, and pre-professional programs.

### Requirements for the Bachelor of Science (B.S.) degree with major in Mathematics

1. University Core Curriculum—49 hours. (See page 69.)  
The Mathematics and Physical Science electives are covered by program requirements.
  2. Courses Specified by this Department—48 hours
    - MTH 1134 Calculus I
    - MTH 1144 Calculus II
    - MTH 2114 Linear Algebra and Differential Equations
    - MTH 2123 Vector Calculus
    - MTH 3103 Foundations of Mathematics
    - MTH 4101 Readings
    - MTH 4123 Abstract Algebra
    - MTH 4143 Real AnalysisOne of the following:
    - MTH 3173 Mathematical Modeling and Simulation
    - MTH 3183 Probability and StatisticsAn additional six hours of upper-division mathematics courses.
    - CS 1113 Introduction to Computing
    - GSC 4133 Faith and Science
    - PHY 2114 General Physics I
    - PHY 2124 General Physics II
  3. Minor field
  4. Complete a standardized achievement test designated by the department.
  5. Electives as necessary to complete minimum total hours
- Minimum total semester hours . . . . .124

### Requirements for minor in Mathematics

The student must successfully complete a minimum of 21 hours

Required courses—3 hours

MTH 2123 Vector Calculus

An additional 18 hours must be selected from MTH.

At least six hours must be upper-division courses.

### Requirements for the Bachelor of Science in Education (B.S.E.) degree with major in Mathematics

See Division of Education, page 148.

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## DEPARTMENT OF PHYSICS

(SYMBOL: PHY)

The courses in this department are planned to meet the requirements of students who intend to specialize in engineering, chemistry, or allied subjects; or are fulfilling pre-medical, pre-dental, or similar pre-professional requirements.

### Requirements for minor in Physics

A minimum of 18 hours from PHY (excluding 1114 and 1124).

At least six hours must be upper-division courses.

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## DEPARTMENT OF RENEWABLE ENERGY

(SYMBOL: RE)

The Department of Renewable Energy prepares students for the challenges of designing, promoting, and implementing renewable energy systems in society's rapidly-changing energy-related industries. Energy, in its many abundant forms, is the driving physical factor upon which industrial societies are founded. Renewable Energy resources include wind power, solar power, biomass and bio-fuels, fuel cells, ground-source heat pumps, geothermal resources, hydroelectric power, tidal and wave power. The Bachelor of Science in Renewable Energy will prepare students for success in these rapidly developing fields and disciplines.

The Renewable Energy Program is a cross-disciplinary program grounded in the belief that students who understand the fundamentals of science and energy conversion, its application to international sustainable development, and the business and management skills to drive its growth market can be effective agents for sustainable change. The department will draw from existing strengths in the Science, Engineering, Business, and Biblical Studies divisions to offer the Bachelor of Science Degree in Renewal Energy with three distinct emphases: Design, Management, and International Development.

### Requirements for the Bachelor of Science (B.S.) degree with major in Renewable Energy

1. University Core Curriculum—46 hours. (See page 69.)  
The Global Studies, Mathematics, and Physical Science electives are covered by program requirements.
2. Courses Specified by this Department—65-76 hours

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A. Renewable Energy Common Courses—27 hours

- CHM 2154 General, Organic, and Biochemistry
- GSC 3003 Global Stewardship (or international study experience in Renewable Energy)
- RE 1113 Introduction to Renewable Energies
- RE 2113 Introduction to Energy Science
- RE 2121 Practicum in Renewable Energy I
- RE 3123 Bio-fuels and Biomass
- RE 3143 Wind Energy
- RE 3163 Solar Energy
- RE 4124 Renewable Energy Capstone

B. One of the following:

1) Design Option—49 hours

- CHM 1124 General Chemistry I
- EE 2223 Electrical Circuits
- EN 1122 Concepts in Electrical Engineering
- EN 1222 Concepts in Mechanical Engineering
- EN 3213 Engineering Materials Science
- ME 3113 Thermal Sciences
- MTH 1134 Calculus I
- MTH 1144 Calculus II
- MTH 2114 Linear Algebra and Differential Equations
- PHY 2114 General Physics I
- PHY 2124 General Physics II

12 hours chosen from (including a minimum of six hours of Engineering courses):

- BIO 3114 Ecology
- CM 3603 Mechanical/Electrical Systems for Buildings
- EE 3313 Electronics I
- ME 3123 Dynamics
- ME 3223 Thermodynamics
- ME 3313 Statics and Strengths of Materials
- ME 4123 Heat Transfer
- MTH 3183 Probability and Statistics

2) Management Option—38 hours

- CHM 1014 Fundamentals of Chemistry
- MTH 1123 Survey of Calculus
- PHY 1114 Fundamentals of Physics I
- PHY 1124 Fundamentals of Physics II
- ATG 1163 Accounting for Decision Making
- BUS 1123 Business Communication



- BUS 2193 Business Statistics
- BUS 3153 Applied Business Ethics
- BUS 4143 Business Law
- EN 2322 Engineering Economics
- LDR 3563 Organizational Leadership
- MGT 2173 Principles of Management
- 3) International Development Option—42 hours
  - CHM 1014 Fundamentals of Chemistry
  - ICS 2113 Intercultural Communications
  - ICS 3133 Cultural Research Methods
  - ICS 3163 Geo-Cultural Studies
  - ICS 3243 Principles and Philosophy of Community Development
  - ICS 3263 Theory and Practice of Appropriate Technology I
  - ICS 3283 Theory and Practice of Appropriate Technology II
  - INT 2183 International Management
  - MTH 1123 Survey of Calculus
  - MTH 2103 Statistics with Computer Applications
  - PHY 1114 Fundamentals of Physics I
  - PYH 1124 Fundamentals of Physics II

One of the following:

- BBL 3303 Theology of Missions
- BBL 3583 Perspectives on the World Christian Movement

3. Electives as necessary to complete minimum total hours

Minimum total semester hours . . . . .124

**Requirements for minor in Renewable Energy**

The student must successfully complete a minimum of 20 hours.

Required courses—20 hours

- CHM 1124 General Chemistry I
- CHM 2154 General, Organic, and Biochemistry
- RE 1113 Introduction to Renewable Energies
- RE 2113 Introduction to Energy Science

Two of the following:

- RE 3123 Bio-fuels and Biomass
- RE 3143 Wind Energy
- RE 3163 Solar Energy



# COURSE DESCRIPTIONS

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## COURSE NUMBERS

Course offerings are numbered utilizing four digits, the first indicating college year and the last the number of semester hours credit.

Courses numbered 0001 to 0999 are considered remedial; hours do not count toward minimum requirements for graduation.

Courses numbered 3001 to 4999 fulfill requirements for upper-division credits. Most of these courses have specified prerequisites.

A *prerequisite* course must have been completed with an acceptable passing grade before enrollment in the given course is permitted.

A *corequisite* is a course in which a student must be enrolled and satisfactorily participating concurrently with the given course.

## ARO (Aerospace Studies ~ Air Force ROTC)

### ARO 1011, 1021 The Foundations of the United States Air Force I, II Each course, one hour

A survey course designed to introduce cadets to the United States Air Force and Air Force Reserve Officer Training Corps. Topics include mission and organization of the Air Force, officership and professionalism, military customs and courtesies, Air Force officer opportunities, and an introduction to communication skills. Accompanying classroom instruction, leadership labs ARO 1010L and 1020L provide hands-on application of classroom topics and further introduction to Air Force opportunities, in an environment that illustrates the basic structure of the Air Force. Standard physical fitness regiment and testing are also required. One hour of classroom and two hours of lab per week.

1011 and 1010L offered fall semester  
1021 and 1020L offered spring semester

### ARO 2011, 2021 The Evolution of Air and Space Power I, II Each course, one hour

A historical survey of air and space power, from the first balloons and dirigibles to the space-age global positioning systems of the Persian Gulf War. Historical examples illustrate the development of Air Force capabilities and missions. Additional topics: Principles of War and Tenets of Air and Space Power. Corequisites to the course work are leadership labs, ARO 2010L and 2020L, which provide hands-on application of classroom topics and further introduction to Air Force opportunities, in an environment that illustrates the basic structure of the Air Force. Standard physical fitness regiment and testing are also required. One hour of classroom and two hours of lab per week. Core 11\_1 will be waived upon completion of both of these courses.

2011 and 2010L offered fall semester  
2021 and 2020L offered spring semester

**ARO 3013, 3023 Air Force Leadership Studies I, II**

**Each course, three hours**

A study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and the communication skills required of an Air Force junior officer. Case studies are used to examine Air Force leadership and management situations. Leadership labs ARO 3010L and 3020L offer concrete leadership practice, including the planning and controlling of military activities of the cadet corps, and preparing various communications. Standard fitness regiment and testing are also required. Three hours of classroom and three hours of lab per week.

3013 and 3010L offered fall semester  
3023 and 3020L offered spring semester

**ARO 4013, 4023 National Security Affairs and Preparation for Active Duty I, II**

**Each course, three hours**

An examination of the national security process, regional studies, advanced leadership ethics, and Air Force doctrine. Special topics of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Communication skills are honed within this structure. Leadership labs ARO 4010L and 4020L include dispensing interviews, guidance, and information, which will increase the understanding, motivation, and performance of other cadets. Physical fitness regiment and testing are also required. Three hours of classroom and three hours of lab per week.

4013 and 4010L offered fall semester  
4023 and 4020L offered spring semester

**ART (Art and Design)**

**ART 1123 Computer Graphics**

**Three hours**

Introduction to the current professional software programs used in the fields of graphic design, illustration, digital media, and photography. Taught on the Macintosh platform. An additional fee associated with this course.

Offered each semester

**ART 1133 Visual Art Foundation**

**Three hours**

A study of the theory and practice of the creative process by focusing on key historical influences and modern trends while incorporating an introduction to the practice of formal art and design principles through hands-on experimentation.

Offered fall semester

**ART 1243 Drawing I**

**Three hours**

An experience in developing visual perception through observation and then translating three-dimensional forms into two-dimensional images. Nature, still-life, and an introduction to figure drawing are included.

Offered each semester

**ART 2103 Foundations in Digital Editing**

**Three hours**

This is the Digital Media Art student's introduction to film and video imaging specifics. The course defines concepts and develops practices of photography, film, and video camera work. An additional fee associated with this course.

Offered each semester

## COURSE DESCRIPTIONS

**ART 2113 Introduction to Cinema** **Three hours**  
An introduction to the skills and art of filmmaking. Theories, genres, and the history of cinema are addressed. Students' explorations of the language and grammar of film culminate in the actual production of their first short form narrative work. An additional fee associated with this course. Prerequisite: ART 2103

Offered spring semester

**ART 2123 Cinematography** **Three hours**  
An introduction to the process of digital cinema through hands-on workshops with cameras, mounting, and lighting equipment. Students gain experience in creating mood and evoking emotion through the proper combination of composition and lighting, which enhances visual storytelling. Student cinematographers develop their creative skills by involvement in both fiction and documentary film productions. An additional fee associated with this course. Prerequisite: ART 2103

Offered fall semester

**ART 2153 European Arts and Culture** **Three hours**  
A study of the historical development of European painting, sculpture, architecture, and music from 1000 a.d. to the present. Special attention is given to the connection between art forms, culture, and worldviews. As part of the German Studies Program, the course combines academic course work with visits to important cultural sites in Germany, Austria, and Italy.

Offered summer, German Studies Program

**ART 2163 Irish Art and Culture** **Three hours**  
A study of Irish art forms such as painting, sculpture, architecture, and film. Special attention is given to the connection between art forms and Irish history and culture. As part of the Irish Studies Program, the course combines academic course work with visits to important cultural sites in Ireland as well as guest lectures from contemporary artists.

Offered Irish Studies Program

**ART 2213 Color Studies** **Three hours**  
An opportunity to explore the transient nature of color by studying the properties of and the relationships between colors. Other related topics will be the psychology of color and current trends. The information gained through this study is essential for all those entering any major in the Department of Visual Arts.

Offered each semester

**ART 2233 Art History I** **Three hours**  
An introduction to the major people and works responsible for our visual heritage. Students will work toward the goal of developing visual literacy in the areas of fine art, design, and architecture. Visual Art majors or minors only.

Offered each semester

**ART 2253 Graphic Design I** **Three hours**  
An introduction to the world of graphic design from typography and design to layout and printing. Includes practice in design of materials such as logos, brochures, posters, and advertising.

Offered each semester

**ART 2263 Graphic Design II** **Three hours**

A continuation of the study of graphic design, with increased emphasis on comping techniques, craftsmanship, typography, problem solving, presentation, and production on the Macintosh. Prerequisite: ART 2253

Offered each semester

**ART 2273 3D Art I** **Three hours**

An introduction to the interface and use of 3D computer modeling software. In project-based assignments, the student proceeds through various types of 3D modeling, texturing, and rendering. An additional fee associated with this course. Prerequisite: ART 1123

Offered fall semester

**ART 2303 Interactive Design I** **Three hours**

This class builds on the principles of design presented in Graphic Design I, with an introduction to practicing design within an interactive perspective. Topics covered will include 2D animation and interactive design principles and practice, in addition to design concepts developed specifically with an interactive approach. An additional fee associated with this course. Prerequisite: ART 2253

Offered each semester

**ART 2333 Art, Design, and Creativity** **Three hours**

A study of the theory and practice of the creative process by focusing on key historical influences and modern trends, while incorporating an introduction to the practice of formal art and design principles through hands-on experimentation.

Offered fall semester (odd-numbered years)

**ART 2343 European Art Tour** **Three hours**

Students tour a major art center of Europe, analyzing masterworks in their historical context, gaining cultural experience, and enriching their own artistic foundations. It is hoped that this experience will result in greater motivation, inspiration, craftsmanship, and depth in the students' creative work. Course requirements include preliminary research targeting at least one of the region's prominent artists, a journal, and a personal summary paper.

Offered summer

**ART 2403 Introduction to Photography** **Three hours**

A beginner's overview to the analog and digital tools and skills required for the modern art of photography. Emphasis is placed on exposure, composition, formal aesthetics, lighting, and printing of the student's photographic vision. The course includes a fundamental study of the photographic process, visual literacy, and artistic criticism necessary for students to advance in study. Visual Arts and Journalism majors have priority for this course. An additional fee associated with this course.

Offered each semester

**ART 2453 Drawing II** **Three hours**

An advancing study of drawing, with emphasis on further development of technical skills as well as conceptual visual thinking. Focus is given to the expressive qualities of drawing as finished pieces of art. Prerequisite: ART 1243

Offered spring semester

## COURSE DESCRIPTIONS

### **ART 2463 Traditional Darkroom** **Three hours**

Students refine and expand photographic skills by learning classical (traditional) printing, hand-coloring, and toning. Alternative processes such as platinum, palladium and gum bichromate black and white, or Polaroid transfers may be included in alternating media. Instructor approval is required. An additional fee associated with this course.

Offered fall semester (odd-numbered years)

### **ART 2503 Typography** **Three hours**

A study of the use of type in graphic design. Topics include the history of type, choosing type, and the technical aspects of setting type. Prerequisite: ART 2253

Offered fall semester

### **ART 2613 Digital Illustration I** **Three hours**

An introduction to creating illustrations on the computer using various image editing software. Various techniques of image manipulation or creation in Photoshop will be covered. Emphasis is given to aesthetic designs and software techniques. Strong drawing skills and digital photography skills are recommended. An additional fee associated with this course. Prerequisite: ART 1123

Offered fall semester

### **ART 3133 Fine Art Photography** **Three hours**

An exploration of artistic expression through both traditional and digital imaging techniques. The course focuses on conceptual and interpretive photography and incorporates a critical, evaluative component that expands and informs the students' understanding of photography as a fine art, past and present. An additional fee associated with this course. Prerequisite: ART 2403

Offered spring semester

### **ART 3153 Digital Darkroom** **Three hours**

A focused look at digital photography processing encompassing capture, color management, device profiling, calibration, and printing. The course provides an advanced study in software image enhancement, retouching, and repairing. All course assignments are professionally printed at the highest digital standards. An additional fee associated with this course. Prerequisites: ART 1123 and 2403

Offered each semester

### **ART 3183 Social Documentary Photography** **Three hours**

A critical look at both documentary and photojournalistic photography genres that provide an emphasis on developing a thoughtful approach to seeking and making meaningful photographs that attract, inform, and communicate. This course involves a sociological and cultural analysis with demanding deadlines that expose students to the realities of working photojournalists. An additional fee associated with this course. Prerequisite: ART 2403

Offered spring semester

**ART 3203 History of Advertising and Design** **Three hours**

A survey of key movements, trends, people, and innovations in the history of advertising and design. Students view work, read histories, and study concepts from the world of design, in hopes of gaining an appreciative understanding of the foundational artistic images and ideas that have been both a response to and an influence upon the culture at large. This analysis of historical commercial art will solidify students' own creative foundations for success in numerous professional fields—web design, advertising, industrial, product design, and graphic design.

Offered fall semester

**ART 3223 3D Art II** **Three hours**

Advancing techniques in 3D computer modeling, texturing, and rendering. Strong drawing skills are assumed as students create concept art and complete complex projects in modeling and rendering. Various 3D modeling applications will be explored. An additional fee associated with this course. Prerequisite: ART 2273

Offered spring semester

**ART 3233 Art History II** **Three hours**

This class continues the visual literacy begun in Art History I with topics that are beyond the scope of the general survey in Art History I. Instruction will focus on specific themes such as Eastern art history, modern art history, religious studies in art history, etc. Prerequisite: ART 2233

Offered spring semester (odd-numbered years)

**ART 3263 Graphic Design III** **Three hours**

Advancing topics in the study of graphic design with special attention paid to the areas of corporate identity and advertising design. Prerequisites: ART 2263 and 2503

Offered fall semester

**ART 3283 Graphic Design in Social Context** **Three hours**

In the context of a study abroad program, Graphic Design in Social Context focuses on the integration of graphic design education and practical hands-on experience in social and cultural setting. Students will study formal design principles and theories, and apply their knowledge to projects suited for the culture in which they are engaged. Design students will need to consider how their conceptual design direction, compositional layout, image creation or selection, and typography will inform their intended message within the context of the culture. Graphic Design in Social Context will often, but not always, include a missions component to the course. Students will often have the opportunity to work with a missions organization designing "live" projects, which will aid the visual communication needs of those organizations. This will provide students with quality "real life" experience which could enhance the student's portfolio. Prerequisites: ART 2263 and 2503

Offered summer

**ART 3323 Figure Drawing I** **Three hours**

A visual study of the human anatomical construction. Emphasis on gesture, form, light source, shadow-mass, and composition. Prerequisite: ART 1243

Offered fall semester



## COURSE DESCRIPTIONS

**ART 3333 Interactive Design II** **Three hours**

This class is an extension of the principles and practices presented in Interactive Design I. The class furthers knowledge and practice in interactive design with particular emphasis on producing work for the web. An additional fee associated with this course. Prerequisite: ART 2303

Offered spring semester

**ART 3363 Watercolor Painting I** **Three hours**

An introductory course into the media of watercolor. The basic techniques and materials are explored.

Offered fall semester (odd-numbered years)

Offered spring semester (even-numbered years)

**ART 3373 Watercolor Painting II** **Three hours**

Continuation of the study of watercolor painting with emphasis on advanced techniques and creativity. Prerequisite: ART 3363

Offered fall semester (odd-numbered years)

Offered spring semester (even-numbered years)

**ART 3383 Oil Painting I** **Three hours**

Studio course with demonstrations, group critiques, and individual instruction to assist the student in learning the basic techniques of painting. Prerequisite: ART 1243

Offered fall semester (even-numbered years)

Offered spring semester (odd-numbered years)

**ART 3393 Oil Painting II** **Three hours**

Continuation of the study of oil painting with emphasis on creativity. Prerequisite: ART 3383

Offered fall semester (even-numbered years)

Offered spring semester (odd-numbered years)

**ART 3403 Film Theory and Criticism** **Three hours**

An examination of the origins and development of film criticism and theory that includes both an analysis of selected motion pictures and the application of theoretical principles. Various schools of analysis are considered, including genre, auteur, feminist, Marxist, and Christian. An additional fee associated with this course. Prerequisites: ART 2103, 2113, and 2123

Offered fall semester

**ART 3423 Figure Drawing II** **Three hours**

A focus on the experimental and expressive use of the figure. Prerequisite: ART 3323

Offered spring semester

**ART 3453 Illustration I** **Three hours**

An exploration of foundational illustration techniques. Rendering in various media is emphasized.

Offered fall semester

**ART 3463 Illustration II** **Three hours**

An advancing study of illustration with emphasis on creativity and solving conceptual problems. Prerequisite: ART 3453

Offered spring semester

**ART 3513 Fine Art Photography and Society** **Three hours**

In the context of a study abroad program, an introduction to the historical genres and continuing methodologies of art photography as applicable to the human geography and social situations of the locale. Students gain hands-on experience as they apply various exercises that explore and evaluate artistic photography using creative methods. Projects involve producing photography in the traditions of nature, landscape, social documentary, and others. May substitute for ART 3133 in Visual Arts curricula. An additional fee associated with this course. Prerequisite: ART 2403

Offered summer

**ART 3543 Commercial Photography in Social Context** **Three hours**

In the context of a study abroad program, an introduction to the commercial photography and the society of a host country. Students make careful observation of the use and effectiveness of commercial photography, and participate in hands-on assignments that attempt to use photography as a commercial influence. Participants often have opportunity to apply the knowledge as they work for a local publication, gaining both quality experience and portfolio enhancement. May substitute for ART 4353 in Visual Arts curricula. An additional fee associated with this course. Prerequisite: ART 2403

Offered summer

**ART 3613 Digital Illustration II** **Three hours**

A continuation of Digital Illustration I. This course will expand the knowledge of digital illustration to various projects. Matte painting and integration of 3D modeling will be explored. An additional fee associated with this course. Prerequisite: ART 2613

Offered spring semester

**ART 3623 Advanced Studio I** **Three hours**

Advanced independent study in the student's choice of media. This course will provide the opportunity for focused research, conceptualization, and application in the student's area of interest. Prerequisites: completion of required courses in the area and consent of instructor

Offered each semester

**ART 3633 Advanced Studio II** **Three hours**

Continued advanced independent study in the student's choice of media. This course will provide the opportunity for focused research, conceptualization, and application in the student's area of interest. Prerequisites: completion of required courses in the area, ART 3623, and consent of instructor

Offered each semester

**ART 3643 Introduction to Printmaking** **Three hours**

This studio course introduces basic printmaking processes and equipment, with equal emphasis on concept and technique. Students are introduced to a variety of printmaking methods such as monotype, relief and intaglio, and various approaches to making and printing plates in each medium. An additional fee associated with this course. Prerequisite: ART 1243

Offered fall semester (odd-numbered years)

## COURSE DESCRIPTIONS

### **ART 3653 Screenprinting** **Three hours**

This studio course introduces the basic concepts and technical skills of serigraphy, or screenprinting. Students learn fine art applications of screenprinting, as well as frame construction, registration, stencil, drawing, and digital output application. The history of screenprinting is also discussed. An additional fee associated with this course. Prerequisite: ART 1243

Offered fall semester (even-numbered years)

### **ART 3743 Interactive Design III** **Three hours**

The third in the Interactive Design course sequence, this class continues to advance knowledge and practice begun previously, with special emphasis paid to portfolio and presentation topics. An additional fee associated with this course. Prerequisites: ART 2303 and 3333

Offered spring semester

### **ART 3881, 3882, 3883 Selected Topics** **One to three hours**

Study of a topic not directly addressed in the regular curriculum. Topics are chosen according to student need and departmental specialties. May be repeated for credit when content differs.

Offered upon sufficient request

### **ART 4103 Portfolio and Presentation** **Three hours**

Practical business aspects of the professions of graphic design, illustration, digital media, and photography, including development of a free-lance business, interviewing for jobs, portfolio development, and self-promotion. Prerequisite: senior standing

Offered spring semester

### **ART 4163 Non-Fiction Film Production** **Three hours**

Analysis of the methods, genre, and history of non-fiction film, for application to hands-on documentary production. Progressive projects through the semester focus on personal student-led filmmaking, culminating in a finished film worthy of entry in documentary film festivals nationwide. An additional fee associated with this course. Prerequisites: ART 2103, 2113, 2123, and consent of instructor

Offered fall semester (even-numbered years)

### **ART 4173 Narrative Film Production** **Three hours**

The application of traditional film roles within the field of digital cinema. Students are given the opportunity to man various crew assignments as they work to complete a short form narrative in one semester. An additional fee associated with this course. Prerequisite: ART 3403

Offered spring semester (odd-numbered years)

### **ART 4203 Scriptwriting** **Three hours**

An introduction to and overview of the elements of theme, plot, character, and dialogue in dramatic writing for film. This course makes use of exercises in dramatic writing: theme, plot, character, dialogue, and images. Integration of these elements into scenes and sequences.

Offered spring semester (even-numbered years)

**ART 4253 3D Art III** **Three hours**

Application of advanced 3D character design and modeling skills. Strong drawing and anatomy skills are required. Various 3D character modeling applications will be explored. An additional fee associated with this course. Prerequisites: ART 3223 and 3323, or consent of instructor

Offered fall semester (odd-numbered years)

**ART 4303 Interactive Design IV** **Three hours**

This class deals primarily with advanced projects and topics current in the interactive design field, with focus on topics particularly relevant to web design professionals. Prerequisites: ART 2303, 3333, and 3743

Offered fall semester (even-numbered years)

**ART 4313 Illustration III** **Three hours**

Designed to challenge students to further develop earlier illustration techniques and to introduce several advanced techniques, emphasis is on the production of professional portfolio-quality illustrations. Prerequisite: ART 3463

Offered fall semester

**ART 4353 Commercial Studio Photography** **Three hours**

An advanced look at the photographic areas of portraiture, food and beverage, fashion, industry, editorial, advertising, and self-promotion photography. The course includes work with digital, 35mm, medium format, and professional 4x5 view cameras. Studio lighting experience is gained with both strobe and hot light setups. An additional fee associated with this course. Prerequisites: ART 2403 and 3153

Offered fall semester

**ART 4413 Graphic Design IV** **Three hours**

Advanced projects and critique along with information and discussion on technical print production issues. Prerequisite: ART 3263

Offered spring semester

**ART 4423 Internship** **Three hours**

On-the-job work experience in a creative position/business, as approved by the student's advisor. Prerequisite: consent of advisor

Offered each semester

**ART 4953 Capstone Exhibition** **Three hours**

Guided planning, preparation, and production of an art exhibit to be mounted in the JBU Art Gallery or other appropriate gallery space. Students will learn professional art business practices in the development of their exhibitions. Prerequisite: senior Fine Art Concentration majors in their final semester

Offered spring semester

**ART 4963 Senior Comprehensive Project** **Three hours**

Original interactive creative works demonstrating proficiency in the fundamental and specialized areas of digital media. Prospective graduates glean assistance through seminar discussion and interactive critiques as they refine their skills in preparation for the realities of the professional world. An additional fee associated with this course. Prerequisites: senior standing and consent of instructor

Offered each semester

## ATG (Accounting)

**ATG 1163 Accounting for Decision Making Three hours**

Survey of financial and managerial accounting for majors outside the Division of Business. The focus is on understanding the meaning of numbers in financial statements, their relationship to each other, and how they are used in evaluating, decision making, planning, and control.

Offered spring semester

**ATG 2173 Principles of Financial Accounting Three hours**

Study of accounting principles and reporting needs of the sole proprietorship, partnership, and corporate forms of business. Topics include the accounting cycle, internal control, asset and liability valuation, and capital stock transactions.

Offered fall semester

**ATG 2183 Principles of Managerial Accounting Three hours**

Study of basic concepts of management accounting, planning and control, management decision making, just-in-time operating, activity-based-costing, and financial statement analysis. Prerequisite: ATG 2173

Offered spring semester

**ATG 3103 Intermediate Accounting I Three hours**

An in-depth study of accounting concepts and procedures relating to assets.

Prerequisite: ATG 2183

Offered fall semester

**ATG 3113 Intermediate Accounting II Three hours**

Advancing topics in accounting including in-depth study of liabilities and equities, income determination, and financial reporting. Prerequisite: ATG 3103

Offered spring semester

**ATG 3153 Federal Income Tax Basics Three hours**

Examines laws and procedures that apply to federal income taxation of individuals, partnerships, S-corporations, and C-corporations. Students develop skills in doing tax returns, written and oral tax arguments, and tax issue recognition. Prerequisite: ATG 2183

Offered fall semester (odd-numbered years)

**ATG 3163 Advanced Federal Income Tax Topics Three hours**

Introduction to estate tax, gift tax, and generation-skipping tax. Study of tax issues relating to formation and dissolution of partnerships and corporations. Prerequisite: ATG 2183 or consent of instructor

Offered spring semester (even-numbered years)

**ATG 3173 Cost Accounting Three hours**

Study of the cost cycle, job order costing, process costing, flexible budgeting, standard costs, direct costing, and non-manufacturing costs. Prerequisite: ATG 2183

Offered spring semester (odd-numbered years)

**ATG 3183 Government and Not-For-Profit Accounting**

**Three hours**

Accounting for governmental units and non-profit organizations. Includes all the new pronouncements and the special rules for hospitals and universities. Emphasis on accounting to help management succeed in accomplishing organizational objectives. Prerequisite: ATG 2183

Offered fall semester (even-numbered years)

**ATG 3993 Accounting Internship**

**Three hours**

Supervised learning involving field experience in an accounting position. Offered during the summer after the junior year. Arrangements for taking the course must be made with the intern coordinator in the spring of the junior year and completed during the fall semester of the senior year. (Same as BUS 3993) Prerequisite: junior standing.

Offered fall semester

**ATG 4131, 4132, 4133 Selected Topics** **One to three hours**

A course offering students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor.

Offered upon sufficient request

**ATG 4153 Auditing and Attestation Services**

**Three hours**

Study of auditing standards, professional conduct, legal liability of auditors, internal control, sampling, the nature of evidence, and auditing techniques necessary for an independent auditor to render an opinion on a company's financial statements. Prerequisites or corequisites: ATG 3103 and BUS 2193

Offered spring semester (even-numbered years)

**ATG 4163 Advanced Accounting**

**Three hours**

Advanced study of accounting concepts and procedures. Includes partnerships, branches, business combinations, consolidated financial statements, multinational enterprises, segments, interim reports, and SEC reporting. Prerequisite: ATG 3113

Offered fall semester (odd-numbered years)

**BBL (Bible)**

**BBL 1013 Old Testament Survey**

**Three hours**

A brief introduction to the history and message of the Old Testament. A general survey of the overall content of each book and certain significant themes stressing relevance to Christian living.

Offered each semester

**BBL 1023 New Testament Survey**

**Three hours**

An introduction to the history and message of the New Testament. The class provides an academic overview of each book, its context, and significant themes with challenges and applications to Christian faith and discipleship.

Offered each semester

## COURSE DESCRIPTIONS

### **BBL 1083H Honors: Old Testament Survey** **Three hours**

A comprehensive introduction to the study of the Old Testament. The course introduces the student to the history and theology of the Old Testament, basic hermeneutical issues, and book content, as well as relevant application to faith and life. Prerequisite: admission to the Honors Program or permission of the Honors Committee  
Offered fall semester

### **BBL 1093H Honors: New Testament Survey** **Three hours**

A comprehensive introduction to the history and message of the New Testament. The class provides an academic overview of the canonical history and reliability of the New Testament documents as well as the historical and cultural background, major themes, and issues for each book including the challenges and applications to Christian faith and discipleship. Prerequisite: admission to the Honors Program or permission of the Honors Committee  
Offered spring semester

### **BBL 2513, 2523 Elementary New Testament Greek I, II** **Each course, three hours**

A study of elementary Greek grammar and basic vocabulary with practice in translation of sentences from Greek to English. BBL 2523 includes translation from the epistles of John from the Greek. Prerequisite for 2523: BBL 2513  
2513 offered fall semester (odd-numbered years)  
2523 offered spring semester (even-numbered years)

### **BBL 3003 Evangelical Theology** **Three hours**

A study of the essential doctrines of the Christian faith including those of the Scriptures, God, Humankind, Salvation (including Christian living) the Church, and the Future. The unity of Divine Revelation and the contemporary applicability of the scriptures are emphasized. Students should be able to discern primary and secondary biblical issues, and apply biblical principles to the various wholeness dimensions of their personal lives and to the world in general. Prerequisites: BBL 1013 and 1023 or equivalent  
Offered each semester

### **BBL 3083H, 4083H Honors: Integrated Theology I, II** **Each course, three hours**

A six-hour course sequence studying the development of Christian faith and practice from the early Christian centuries down to the present. The course will be historical, in that the faith and practice of the Christian tradition will be studied in specific cultural and historical contexts and will also be theological, tracing the development of ideas and how they play themselves out in the practice of Christian faith. In addition, the course will present a brief survey of Islamic faith and practice under the assumption that Christian faith and practice is best understood when it is seen in the light of competing alternatives. At critical points throughout the study, similarities and differences in how a specifically Christian approach to theology and practice will be discussed in light of the theology and practice of Islam. The focus of the course is on primary sources. Prerequisites: admission to the Honors Program or permission of the Honors Committee, EGL 1023 and HST 1013 and 1023 (or Honors counterparts), BBL 1013, and 1023 (or Honors counterparts).

3083H offered fall semester (odd-numbered years)  
4083H offered spring semester (even-numbered years)



**BBL 3223 Communicating the Christian Message Three hours**

A foundational course to provide tools for preaching, speaking, and presenting the Christian message in a variety of contexts using various media. Includes an introduction to theory for creating and delivering different forms of communication, as well as practical ideas and tips for using various media. Prerequisite: BBL 34\_3 or 36\_3

Offered fall semester

**BBL 3303 Theology of Missions Three hours**

A historical and theological investigation of the nature and practice of missionary activity. The role of the local church, personal qualifications, missionary agencies, and current perspectives of missions are considered.

Offered upon sufficient request

**BBL 3353 Theology of Worship Three hours**

A historical and theological investigation of the development of corporate worship emphasizing applicable Hebrew and Christian scriptures. Liturgical history is examined including the dynamics of music, sacred space, and symbols and icons from the Early Church to the contemporary emergent church. Prerequisites: BBL 1013 and 1023

Offered fall semester (odd-numbered years)

**BBL 3363, 3373 History of the Christian Church I, II**

**Each course, three hours**

A historical and theoretical examination of the development of the church. The first course addresses the Early Church, Patristic, Byzantine, and Medieval periods; the sequence is completed by study of the Reformation, Enlightenment, and Modern periods. Prerequisite for 3373: BBL 3363

3363 offered fall semester

3373 offered spring semester

**BBL 34\_3 New Testament Book Study Each course, three hours**

Critical study of a major book or portion of the New Testament. Students learn the principles of biblical hermeneutics rooted in rigorous exegesis. Courses are offered on a rotating basis. Prerequisite: BBL 1023

**3413 The Gospel of John.** Exploration of John's Gospel in relationship to the synoptic Gospels and the emerging theology of the Early Church in its first-century cultural context within the Roman Empire.

**3423 The Synoptic Gospels.** Exploration of the Gospels of Matthew, Mark, and Luke. Using parallel format, the books are studied in relation to each other, to John's Gospel, and to the rest of the New Testament and Hebrew canon where appropriate. Special attention is paid to the synoptic authors, initial audiences, theological foci, and the historical and cultural background of the synoptics as well as the dynamics of the emerging church, and the social, economic, political, and religious contexts of the first-century Roman Empire.

**3433 The Gospel of Luke and The Acts of the Apostles.** An analysis of Luke and Acts. Emphases include the literary techniques, the historical setting, and the message of the books. Students are exposed to critical issues related to the authorship, sources, dating, and audience of these books.

**3443 The Pauline Epistles.** A study of the life of Paul with concerted analysis of one or more of his epistles. In addition to the man himself, special attention is paid to his initial audiences, theological foci, and the historical and cultural background of the letters, as well as the dynamics of the emerging church, and the social, economic, political, and religious contexts of the first-century Roman Empire.



## COURSE DESCRIPTIONS

**3453 The General Epistles.** An incisive examination of one or more of the the General Epistles. The selected section is compared to the rest of the New Testament and to the Hebrew canon where appropriate. Special attention paid to the author, initial audiences, theological foci, and the historical and cultural background of the text, as well as the dynamics of the emerging church, and the social, economic, political, and religious contexts of the first-century Roman Empire.

**3463 The Book of Revelation.** An in-depth analysis of the book of Revelation. Special emphasis is placed on major hermeneutical approaches to the book, as well as thorough study of its contents.

Offered each semester on a rotating basis

### **BBL 3513, 3523 Syntax of New Testament Greek I, II**

**Each course, three hours**

A study of the structure of the Greek language accomplished by 1) reading sustained New Testament passages and 2) understanding the syntactical functions which occur in them. Prerequisite for 3513: BBL 2523 or equivalent. Prerequisite for 3523: BBL 3513 or equivalent.

3513 offered fall semester (even-numbered years)  
3523 offered spring semester (odd-numbered years)

### **BBL 3583 Perspectives on the World Christian Movement**

**Three hours**

A comprehensive 15-week course taught by outstanding teachers, expert speakers, missionaries, and Bible scholars, designed to illumine God's plan for reaching people throughout the world. As current and past methods are examined, students are given opportunity to consider their personal roles in His work. An additional fee associated with this course. Prerequisite: junior standing or consent of instructor

Offered spring semester

### **BBL 36\_3 Old Testament Book Study Each course, three hours**

A rigorous study of a major portion of the Old Testament with opportunity to learn and apply the principles of biblical hermeneutics. The courses are offered on a rotating basis. Prerequisite: BBL 1013

**3613 The Pentateuch.** An analysis of one or more books drawn from the first five books of the Old Testament. Issues related to the content, the literary presentation, the historical context, and the theological and practical use of these books are addressed. Students are exposed to critical issues in dating, authorship, and interpretation of the books.

**3623 Historical Books of the Old Testament.** An analysis of one or more books drawn from the Historical Books, Joshua through Esther. Issues related to the content, the literary presentation, the historical context, and the theological and practical use of these books are addressed. Students are exposed to critical issues in dating, authorship, and interpretation of the books.

**3633 Old Testament Poetry and Wisdom.** An analysis of one or more books drawn from those typically classified among the Poetic Books, or as Wisdom Literature. (At the instructor's discretion, books classified as "Writings" in the Hebrew Bible may be included.) Issues related to the content, the literary presentation, the historical context, and the theological and practical use of these books are addressed. Students are exposed to critical issues in dating, authorship, and interpretation of the books.

**3643 Major Prophets.** An analysis of one or more of the major Prophetic books, Isaiah through Daniel. Issues related to the content, the literary presentation, the historical context, and the theological and practical use of these books are addressed. Students are exposed to critical issues in dating, authorship, and interpretation of the books.

**3653 Minor Prophets.** An analysis of selected books of the so-called Minor Prophets, Hosea through Malachi. Issues related to the content, the literary presentation, the historical context, and the theological and practical use of these books are addressed. Students are exposed to critical issues in dating, authorship, and interpretation of the of the books.

Offered each semester on a rotating basis

### **BBL 3713, 3723 Elementary Biblical Hebrew I, II**

**Each course, three hours**

A study of elementary biblical Hebrew grammar and basic vocabulary with some limited conversational drill. Prerequisite for 3723: BBL 3713

Offered upon sufficient request

### **BBL 4002 Capstone Seminar in Christian Life** **Two hours**

A seminar capstone course of the Core Curriculum designed to encourage critical and reflective thought about Christian formation. The Core Curriculum's role in the student's spiritual formation is considered and assessed. Prerequisites: BBL 1013, 1023, 3003, EGL 1023, and junior standing or consent of instructor

Offered each semester

### **BBL 4043 Capstone Seminar in Christian Formation: Ireland**

**Three hours**

A writing-intensive course designed to encourage critical and reflective thought about Christian formation. The Core Curriculum's significant role in Christian formation is considered. Works of St. Patrick and C.S. Lewis are presented as a basis for student reflection and as guides to Christian living. Students visit historical sites significant to each of these men and develop an understanding of their writings and contributions to the Christian faith. Visits to local churches give students opportunity to observe the present-day church in Ireland and to enjoy fellowship with Irish believers of various denominations. May substitute for BBL 4002 in the Core Curriculum. Prerequisites: BBL 1013, 1023, 3003, and EGL 1023

Offered summer, Irish Studies Program

## COURSE DESCRIPTIONS

**BBL 4473 Seminar in Biblical Studies** **Three hours**  
An advanced study of a particular issue related to Biblical Studies. Potential topics include critical issues in a book of the Old or New Testament or a current trend in biblical studies or hermeneutics. Course may be repeated when content differs. Prerequisite: junior standing or consent of instructor  
Offered spring semester (odd-numbered years)

**BBL 4481, 4482, 4483 Selected Topics** **One to three hours**  
Topics are chosen from some area of Biblical Studies (Old Testament, New Testament, Biblical History, or Theology). The course affords an opportunity for the student to do independent study and research under the supervision of the instructor. Prerequisite: junior standing or consent of instructor  
Offered upon sufficient request

**BBL 4493 Seminar in Theological Studies** **Three hours**  
A course designed to develop the student's ability to analyze and explain theological texts through research, discussion, and presentation of papers. A particular theologian, movement, or topic from the history of Christian theology typically serves as the focus of evaluation. May be repeated for credit when content differs. Prerequisite: junior standing or consent of instructor  
Offered spring semester (even-numbered years)

**BBL 4512 Greek Readings and Exegesis** **Two hours**  
Readings from books of the Greek New Testament and/or selected readings from Jewish or early Christian texts in Greek. Course may be repeated when content differs. Prerequisite: BBL 3523 or equivalent  
Offered upon sufficient request

**BBL 4581, 4582, 4583 Selected Topics: New Testament Greek** **One to three hours**  
Topics chosen from some area of New Testament Greek. The student may also do independent study and research under the direction of the instructor. Prerequisite: BBL 3523 or consent of instructor  
Offered upon sufficient request

**BBL 4713, 4723 Syntax of Biblical Hebrew I, II** **Each course, three hours**  
An intermediate level study of Hebrew grammar and syntax. Expanded vocabulary and translation from Hebrew to English and English to Hebrew are also emphasized. Prerequisite to BBL 4723: BBL 4713  
Offered upon sufficient request

## BIO (Biology)

**BIO 1003 Biological Science** **Three hours**  
An introductory survey of biology designed for liberal arts students who are not majoring in the sciences. Topics addressed include cellular processes, genetics, evolution, biotechnology, biodiversity, and ecology with emphasis on current issues. Laboratory experiences emphasize the scientific method and biological processes. Two hours lecture-discussion and one two-hour laboratory per week.  
Offered each semester

**BIO 1093H Honors: Biological Science** **Three hours**

A consideration of the fundamental principles of biology with an emphasis on cellular processes, ecological associations, biotechnical applications, genetics, and evolution.

Prerequisites: admission to the Honors Program or permission of the Honors Committee

Offered spring semester

**BIO 1124 Cell Biology** **Four hours**

An introduction to the study of living systems, beginning with the molecules of life and progressing to cellular and organismic levels of organization. Students are exposed to numerous topics in biochemistry, cell structure, energy processing, genetics, and molecular biology. Laboratory exercises reinforce concepts and biological processes discussed in the lecture. Three hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

**BIO 1134 Plant Biology** **Four hours**

An introduction to the study of the plant kingdom, emphasizing adaptive aspects of anatomy, morphology, classification, physiology, ecology, and evolution of plants. Three hours lecture-discussion and one two-hour laboratory per week.

Offered spring semester

**BIO 2134 Animal Biology** **Four hours**

A study of major zoological phyla. Emphasis is placed on anatomical and physiological distinctions of each taxon, as well as classification and interrelationships. Three hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

**BIO 2174 Genetics** **Four hours**

A study of basic concepts in classical and molecular genetics. Topics include Mendelian inheritance and its variations, linkage, chromosomes, gene mapping, bacterial and viral genetics, extranuclear inheritance, DNA structure and replication, mutation, DNA repair, recombinant DNA technology, genetic code, and gene expression/regulation. Laboratory exercises illustrate principles of inheritance in various biological systems and provide hands-on experience with several recombinant DNA techniques. Three hours lecture-discussion and one three-hour laboratory per week. Prerequisite: BIO 1124

Offered spring semester

**BIO 3101 Biology Teaching Practicum** **One hour**

Practical experience in lab preparation and instruction. Three hours per week.

Prerequisites: junior standing and consent of instructor. May be repeated once for credit.

Offered upon sufficient request

**BIO 3114 Ecology** **Four hours**

A study of the principles of ecology with emphasis on the interrelationships between organisms and their biotic and abiotic environments. Prerequisites: BIO 1134 and 2134

Offered spring semester (even-numbered years)

## COURSE DESCRIPTIONS

- BIO 3164 Marine Biology** **Four hours**  
A study of the biological, chemical, and physical processes that promote and maintain marine life, establishing links between marine systems, biological processes, and human activity. The laboratory portion of the course consists of an intensive spring-break study trip to the Florida Keys. An additional fee associated with this course. Prerequisite: BIO 2134 or consent of instructor  
Offered spring semester (odd-numbered years)
- BIO 3174 Molecular Cell Biology** **Four hours**  
An advanced study of structure-function relationships in eukaryotic cells. Emphasis on cell membranes, organelles, protein targeting, secretory pathway, bioenergetics, cytoskeleton, and cell motility. Regulation of the cell cycle, cell signaling, and recognition/adhesion are also examined, particularly as they relate to malignancy. Labs focus on experimental studies of cellular structure and function using techniques of modern cell and molecular biology. Three hours lecture-discussion and one three-hour laboratory per week. Prerequisites: BIO 2174 and CHM 3144  
Offered fall semester
- BIO 3184 Developmental Biology** **Four hours**  
Development of vertebrates and invertebrates from gametogenesis through organogenesis. Emphasis is on cellular and molecular mechanisms involved in differentiation, morphogenesis, and determination of the body plan. Labs focus on experimentation with living, developing organisms. Three hours lecture-discussion and one three-hour laboratory per week. Prerequisites: BIO 2174; BIO 2134 and 3174 are recommended  
Offered spring semester (even-numbered years)
- BIO 3201 Cadaver Dissection** **One hour**  
A practical study designed for transfer students who have successfully completed a college-level anatomy course that lacked cadaver dissection. Offered concurrently with the BIO 3514 laboratory.  
Offered fall semester
- BIO 3301 Field Experience** **One hour**  
Experience for Biology, Biochemistry, and Environmental Science majors in their area of interest while they observe a science or health-related profession in a setting approved by the department. A journal and/or paper is required. Prerequisites: junior standing and approval of major advisor  
Offered each semester
- BIO 3334 Microbiology** **Four hours**  
A study of the structure, function, control, physiology and classification of prokaryotes and viruses. Two hours lecture and two two-hour laboratories per week. Prerequisites: BIO 1124 and CHM 1124  
Offered fall semester
- BIO 3514 Human Anatomy** **Four hours**  
Description and discussion of basic tissues, organs, and organ systems of the human. The laboratory is a concentrated study of histology and gross human anatomic structure. Analysis of prepared slides, anatomical models, and cadaver dissection are included. Three hours lecture-discussion and one three-hour laboratory per week. Prerequisites: BIO 1124 and 2134, or consent of instructor  
Offered fall semester

**BIO 3524 Animal Physiology** **Four hours**

A detailed study of the basic physiology of vertebrate organisms, including muscle, neural, cardiovascular, respiratory, urinary, digestive, endocrine, and reproductive system. Laboratories include surgical procedures and experimental manipulations of live specimens to observe and record various physiological functions. Three hours lecture-discussion and one three-hour laboratory per week. Prerequisites: BIO 1124, 2134, and CHM 1124; BIO 3514 recommended

Offered spring semester

**BIO 4103 Bioethics** **Three hours**

A comparison of secular and Christian approaches to basic ethical issues related to the environment, the treatment of animals, and the practice and distribution of health care. Utilizes a highly interactive format to examine various ethical theories, case studies, and current literature on a number of contemporary issues, with primary focus on biomedical ethics. Three hours of lecture-discussion per week. Prerequisite: junior standing with a major in biology, biochemistry, or environmental science; or consent of instructor

Offered spring semester (odd-numbered years)

**BIO 4121, 4122, 4123, 4124 Selected Topics in Biology** **One to four hours**

Topics are chosen from areas of life science such as anatomy, biotechnology, cell biology, developmental biology, ecology, genetics, histology, marine biology, microscopy, molecular biology, and physiology. May be repeated for credit when content differs. Prerequisites: junior/senior standing and consent of instructor

Offered spring semester (odd-numbered years)

**BIO 4221, 4222, 4223 Biological Research** **One to three hours**

Laboratory-based research projects in an area of biology of interest to the student and supervising faculty. May be repeated for credit up to the maximum number of hours allowed for research credit in Biology or Biochemistry majors.

Offered each semester

**BUS (Business Administration)**

**BUS 1123 Business Communication** **Three hours**

Development of professional communication skills, both written and oral, in business. Includes mechanics, techniques, and psychological principles of effective business communications with emphasis on contemporary communication technologies. Prerequisite: EGL 1013

Offered spring semester

**BUS 2113 Financial Spreadsheet Applications** **Three hours**

Practice in using spreadsheets for accounting and financial applications. Emphasizes creating schedules, financial modeling, generating macros, and producing reports. Prerequisite: ATG 1163 or 2173

Offered spring semester

**BUS 2153 Financial Mathematics** **Three hours**

Study of time-value models used in business. Topics include simple interest, compound interest, annuities, debt extinction, and bond pricing. Prerequisite: MTH 1113 or consent of instructor

Offered fall semester



## COURSE DESCRIPTIONS

- BUS 2193 Business Statistics** **Three hours**  
A general course in statistical theory as it applies in business settings. Topics include probability, distributions, descriptive statistics, estimation, hypothesis testing, regression and correlation, non-parametric methods, ANOVA, and statistical quality control.  
Prerequisite: MTH 1113  
Offered spring semester
- BUS 2333 Introduction to Sport Management and Recreation** **Three hours**  
An analysis of the total field of recreation, leisure, and sports management—its scope, organizational practices and problems—and detailed discussions of relevant research and information. Students also gain a basic understanding of recreation and leisure as increasingly important aspects of our culture.  
Offered fall semester (even-numbered years)
- BUS 2353 Commercial Recreation** **Three hours**  
A study of recreational opportunities in the private sector including industrial corporations, establishment of private corporations, for profit and nonprofit camps and sport clubs, and the use of public land by private endeavor.  
Offered spring semester (even-numbered years)
- BUS 3123 Developing Applications with Access** **Three hours**  
Practice in developing applications for managing information with Microsoft Access. Specific activities include creating and maintaining electronic files, forms, sorts, reports, queries, and writing macros and procedures. Prerequisite: junior standing  
Offered fall semester
- BUS 3153 Applied Business Ethics** **Three hours**  
An integrated set of activities designed to raise student awareness of real-life business moral dilemmas while gaining practical experience in the implementation and operation of business ethics programs and departments. Students write business cases, draft corporate codes of conduct, and study cases and laws related to corporate governance. Students interact with business ethics professionals and the Soderquist Center for Leadership and Ethics. Prerequisite: junior standing  
Offered each semester
- BUS 3993 Internship** **Three hours**  
Supervised learning involving field experience in a business firm. Offered during the summer after the junior year. Arrangements for taking the course must be made with the intern coordinator in the spring of the junior year and completed during the fall semester of the senior year. (Same as ATG 3993) Prerequisite: junior standing  
Offered fall semester
- BUS 4111 Field Experience** **One hour**  
Supervised learning involving field experience in a business firm. Students enter into a learning agreement, document the work, meet with supervising faculty, and complete reflective assignments on the learning outcomes. As many as three field experience credits may count toward graduation hours. Prerequisite: BUS 3993  
Offered upon sufficient request

**BUS 4131, 4132, 4133 Selected Topics** **One to three hours**

A course offering students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor  
Offered upon sufficient request

**BUS 4143 Business Law** **Three hours**

Basic legal principles that govern modern business transactions. Topics include contracts, real and personal property, agencies, employment, business formation, and Uniform Commercial Code. Prerequisite: junior standing  
Offered fall semester

**BUS 4173 Business Finance** **Three hours**

Study of decision-making techniques involving working capital management, capital budgeting, long-term financing, and dividend policy. Prerequisites: ATG 2183, BUS 2153, and ECN 2123  
Offered fall semester

**BUS 4243 International Law** **Three hours**

A look at areas of business law from an international viewpoint. Topics include the U.S. Constitution, government regulations of business, regulation of international trade, negotiable instruments, major western and non-western legal traditions, treaties, multinational companies, customs, conflicts of law, and international contracts.  
Offered spring semester (even-numbered years)

**BUS 4353 Sport Law** **Three hours**

An opportunity for students to develop legal insight for effective management and the avoidance of legal complications associated with sport and recreation activities. Topics addressed include: liability for injuries, risk management, crisis management, assertion of legal rights, legal status of sports organizations, and right to participate. Other areas of sport industry law to be covered are contracts, tort liability, negligence, gender equity, and sport labor relations.  
Offered fall semester (odd-numbered years)

**BUS 4993 Strategic Management** **Three hours**

An integrative study of business strategy and policy involving case studies, simulations, research, and formal presentations. Focus is on procedures and practices of upper-level management. This is a capstone course open only to seniors in the Division of Business and should be taken during the student's final fall semester at the university. An additional fee associated with this course. Prerequisite: senior standing  
Offered fall semester

## **CHM (Chemistry)**

**CHM 1014 Fundamentals of Chemistry** **Four hours**

An introduction to the field of chemistry. Designed to provide students with an understanding of basic chemical principles and their application to relevant problems, course work is suitable for students in construction management, nursing, and the liberal arts. Three hours lecture-discussion and one two-hour laboratory per week. Prerequisite or corequisite: MTH 1113 or ACT Math score of 19  
Offered spring semester



## COURSE DESCRIPTIONS

### **CHM 1101, 3101 Chemistry Practicum**

**Each course, one hour**

Experiences in chemistry, such as: glassblowing, analysis, teaching, research.

Prerequisite: consent of instructor

Offered upon sufficient request

### **CHM 1124 General Chemistry I**

**Four hours**

A systematic study of basic chemical principles and properties that govern matter and its changes. Topics include the basic structure of atoms and molecules, chemical and physical properties, balancing chemical equations, and bonds. Three hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

### **CHM 1134 General Chemistry II**

**Four hours**

Topics include thermodynamics, kinetics, and chemical reactions; properties of gases, solids, and liquids; aqueous equilibria and an introduction to electrochemistry and transition metal elements. Three hours lecture-discussion and one two-hour laboratory per week. Prerequisite: CHM 1124

Offered spring semester

### **CHM 2151 Seminar: Nanotechnology**

**One hour**

An introduction to nanotechnology using the fundamental principles of matter as a guide. Discussion of both the scientific and ethical ramifications of nanotechnology using a series of readings. Prerequisite: CHM 1014 or 1124

Offered fall semester (even-numbered years)

### **CHM 2154 General, Organic, and Biochemistry**

**Four hours**

A combined study of General Chemistry, Organic Chemistry, and Biochemistry. Topics include general chemical reactions, the chemistry and nomenclature of the hydrocarbons, and the chemistry of carbohydrates, lipids, and proteins. The laboratory period is designed to have an emphasis on the synthesis and chemistry of the bio-fuels. Three hours lecture-discussion and one three-hour laboratory-quiz period per week. Prerequisite: CHM 1014 or 1124

Offered spring semester

### **CHM 3114 Introduction to Analytical Chemistry**

**Four hours**

A laboratory intensive course designed to introduce students to the field of analytical chemistry. Topics include chemical equilibrium, wet chemical methods of analysis, and physicochemical methods of analysis such as spectrometry and chromatography. Required for chemistry and biochemistry majors and recommended for environmental science majors. Prerequisite: CHM 1134

Offered spring semester (even-numbered years)

### **CHM 3134, 3144 Organic Chemistry I, II Each course, four hours**

A systematic study of the hydrocarbons and their derivatives, general organic reactions, and theories of reaction mechanics. The laboratory work gives training in the preparation and properties of type compounds. Three hours lecture-discussion-quiz and three hours laboratory per week. Prerequisite for 3134: CHM 1134 with a minimum grade of 'C' or consent of instructor Prerequisite for 3144: CHM 3134

3134 offered fall semester

3144 offered spring semester

**CHM 3151, 3152, 3153 Selected Topics One to three hours**

Topics are chosen from the various branches of chemistry. May be repeated for credit when content differs. Prerequisite: consent of instructor  
Offered upon sufficient request

**CHM 3164 Biochemistry Four hours**

A study of macromolecular and metabolic biochemistry with an emphasis on carbohydrates, lipids, and proteins with an introduction to nucleic acids. The chemical basis for biological phenomena, bioenergetics, and metabolic regulation is stressed. Three hours lecture-discussion and one three-hour laboratory-quizz period per week. Prerequisite: CHM 3144 or consent of instructor  
Offered spring semester (odd-numbered years)

**CHM 3183 Inorganic Chemistry Three hours**

Coverage of the bonding and properties of the main group and especially transition metal elements with a focus on their coordination and solid-state chemistry. Molecular symmetry principles, spectroscopy, and catalytic applications of these substances are discussed. An emphasis on organometallic and bioinorganic chemistry. Prerequisite: CHM 1134  
Offered fall semester (odd-numbered years)

**CHM 4124, 4134 Physical Chemistry I, II Each course, four hours**

A study of the principles of chemistry from an exact, quantitative standpoint. Behavior of matter in the various states, thermodynamic relationships, kinetics of reaction, molecular and atomic structure, phase equilibria, electro-chemistry. Includes three hours laboratory per week. Prerequisites: CHM 3144 and PHY 2124  
Prerequisite or corequisite: MTH 1144  
4124 offered fall semester (even-numbered years)  
4134 offered spring semester (odd-numbered years)

**CHM 4221, 4222, 4223 Chemistry Research One to three hours**

Laboratory-based research projects in an area of Chemistry or Biochemistry of interest to the student and supervising faculty. May be repeated for credit, with a maximum of four hours counting toward degree credit in Biochemistry. Prerequisite: consent of instructor  
Offered each semester

**CM (Construction Management)**

**CM 1112 Construction Techniques I Two hours**

Instruction in and application of basic construction techniques by involvement in an actual construction project. One hour lecture-discussion and three hours laboratory per week.  
Offered fall semester

**CM 1122 Construction Techniques II Two hours**

Instruction in and application of basic construction techniques by involvement in an actual construction project. Basic instruction in arc welding is included. One hour lecture-discussion and three hours laboratory per week.  
Offered spring semester

## COURSE DESCRIPTIONS

**CM 1223 Graphic Communication Skills** **Three hours**

The study and practice of communicating ideas through manual and digital means. Emphases include the development of lettering and sketch abilities, communication through construction documents, an introduction to construction assemblies and an overview of three-dimensional model based design, and construction documentation. Two three-hour laboratory periods per week.

Offered spring semester

**CM 1313 Materials of Construction** **Three hours**

A comprehensive study of the properties, manufacture, and uses of building construction materials. Investigation into the appropriate application of materials for design and functional intent is addressed. Three hours lecture-discussion per week.

Offered fall semester

**CM 2213 Construction Methods I** **Three hours**

A study of the assemblies, methods, sequences, and equipment used in constructing residential projects. The use of the International Residential Code and local jurisdiction ordinances and their effect on both the site and building construction is included. Two hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

**CM 2223 Construction Methods II** **Three hours**

A study of the assemblies, methods, sequences, and equipment used in commercial construction projects. An emphasis on the planning and managing of the commercial construction process is included. Two hours lecture-discussion and one two-hour laboratory per week.

Offered spring semester

**CM 2322 Statics and Strength for Technology** **Two hours**

A study of forces on statically determinate rigid bodies at rest including analysis of determinate trusses. An introduction to stress and strain in beams and columns is included. Two hours lecture-discussion per week. Prerequisite: MTH 1122 or equivalent

Offered spring semester

**CM 2431 Construction Internship A** **One hour**

Orientation to work on a construction site. The student is responsible to secure summer employment in construction with assistance from the instructor. Taken prior to CM 2441

Offered spring semester

**CM 2441 Construction Internship B** **One hour**

Ten weeks (a minimum of 400 hours) of construction work with prior approval of the major advisor. A written report of activities is required. Credit or equivalence for this course can be earned during the summer months. Prerequisite: CM 2431

Offered fall semester

**CM 2513 Surveying** **Three hours**

A study of the fundamentals of measuring techniques as they relate to leveling, construction layout, and mapping. Emphasis is given to the care and use of optical and electronic instruments. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: MTH 1122 or equivalent

Offered fall semester

**CM 3213 Construction Safety and Quality** **Three hours**

A study of safety and quality control as it relates to construction management. An emphasis on the financial impact of safety and quality management is included. Also included is instruction adequate to earn the ten-hour Occupational Safety and Health Administration (OSHA) certificate. Three hours lecture-discussion per week.

Prerequisite: CM 2213 or CM 2223

Offered spring semester

**CM 3233 Structural Systems for Buildings** **Three hours**

A study of the design of steel structural elements typically found in buildings and a consideration of steel erection procedures. Also the study of the design and control of concrete mixtures and of the design of simple reinforced concrete structural elements. Concrete Field Testing Certification instruction included. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: CM 2322 or ME 3313

Offered spring semester

**CM 3413 Estimating I** **Three hours**

An introduction to construction estimating and bid preparation with an emphasis on quantity takeoff. Residential and light commercial projects are emphasized with integration of construction accounting. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: CM 2213 or 2223

Offered fall semester

**CM 3501, 3502, 3503 Selected Topics** **One to three hours**

Study of a specific area of the construction industry, such as work methods or equipment selection. May be used for independent study. May be repeated for credit when content differs. Prerequisite: consent of department head

Offered upon sufficient request

**CM 3603 Mechanical/Electrical Systems for Buildings** **Three hours**

A study of mechanical, electrical, and plumbing systems of residential and commercial buildings. An introduction to mechanical, electrical and plumbing codes, and design software are included. Energy conservation issues and the environmental impact of construction are discussed. Two hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

**CM 3613 Architectural Design I** **Three hours**

The design, development, and presentation of an architectural program for a residence. Introduction to design principles and their influence in the development of a project is addressed. The architect, contractor, and owner working relationships are emphasized. Two three-hour laboratory periods per week. Prerequisites: CM 1223 and junior standing, or consent of instructor

Offered fall semester

**CM 3623 Architectural Design II** **Three hours**

The design, development, and presentation of an architectural program for a commercial project. Course emphasis includes design intent, effective communication of problem-solving solutions, and an introduction to integrated project delivery. Two three-hour laboratory periods per week. Prerequisites: CM 3613 and junior standing, or consent of instructor

Offered spring semester

## COURSE DESCRIPTIONS

**CM 4323 Construction Contracting** **Three hours**  
A study of the management aspects of the construction industry including firm organization, roles and responsibilities, contracts, specifications, bonding and insurance, labor relations, and labor law. Ethical issues relevant to construction are discussed. Three hours lecture-discussion per week. Prerequisite: senior standing or consent of instructor  
Offered spring semester

**CM 4423 Estimating II** **Three hours**  
A detailed study and application of pricing, subcontract evaluation, and bidding techniques using blueprints and specifications. Projects include several commercial building projects. An introduction to construction financing is included. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisites: CM 2223, 3413, and senior standing or consent of instructor  
Offered spring semester

**CM 4613 Construction Project Planning and Scheduling** **Three hours**  
A study of construction project management systems with emphasis on project planning and scheduling. Critical path schedules are developed using Primavera and Microsoft software. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: senior standing or consent of instructor  
Offered fall semester

**CM 4713 Construction Management I** **Three hours**  
A capstone experience involving application of management techniques on an actual construction project. Planning, estimating, procurement, project execution, supervision of CM 1112 students, and coordinating subcontractors is included. One one-hour planning session and two four-hour laboratory periods per week. Prerequisite: senior standing  
Offered fall semester

**CM 4723 Construction Management II** **Three hours**  
A capstone experience involving application of management techniques on an actual construction project. Planning, estimating, procurement, project execution, supervision of CM 1122 students, and coordinating subcontractors is included. One one-hour planning session and two four-hour laboratory periods per week. Prerequisite: senior standing  
Offered spring semester

## CMN (Christian Ministries)

**CMN 1213 Christian Leadership and Service** **Three hours**  
This course introduces God's Kingdom concerns and the students role in His plan (Kingdom) by studying the biblical concepts of leadership and cultural engagement. Students will also evaluate how God might be calling them to serve and integrate their faith with their vocation.  
Offered spring semester

**CMN 1632 WILD Adventure Program** **Two hours**

An intensive multi-day experience available to incoming first-year and transfer students accepted into the Wilderness Impact on Leadership and Discipleship (WILD) Program. The focus is upon group living and interpersonal dynamics designed to enhance personal spiritual growth through participation in outdoor pursuit activities such as backpacking, canoeing, rock climbing, and rappelling. Significant time is spent on the JBU challenge course leading up to a multi-day trip into a pristine backcountry location (e.g., the Boundary Waters, the Rocky Mountains, the Smoky Mountains). An additional fee associated with this course.

Offered fall semester

**CMN 2223 Challenge Course Programs and Management**

**Three hours**

Historical, theoretical, and experiential understanding of program and management practices associated with the use of adventure initiatives and challenge courses as an educational medium with a variety of populations. Introduction to technical skill development, facilitation strategies, processing techniques, safety procedures, equipment management, program design, evaluation methods, and applications to specific client groups. Use of challenge course programs for ministry in camp and adventure settings is emphasized.

Offered spring semester

**CMN 2263 Discipleship and Evangelism** **Three hours**

A consideration of the biblical and practical application of discipleship and evangelism. The social, cultural, community, and ontological ramifications of discipleship and evangelism are considered, as well as a critique of current issues, worldview, and the needs of the twenty-first century world. Prerequisites: BBL 1013 and 1023

Offered each semester

**CMN 2283 Camping and Outdoor Recreation Skills** **Three hours**

Advanced training in skills essential for an effective camp/recreation career. Students are exposed to outdoor recreational activities such as riflery, archery, low and high ropes course, backpacking, hiking, swimming, canoeing, and horseback riding. An additional fee associated with this course.

Offered upon sufficient request

**CMN 2303 Creating Holistic Curriculum for Children in Crisis**

**Three hours**

Students create intentional learning experiences that offer holistic support (emotional, psychological, and spiritual) to children who are facing traumatic or life-changing issues. The course addresses basic pedagogical, developmental, and biblical/theological principles for developing curriculum; students also have the opportunity to teach three lessons during the semester. Ultimately, students write a curriculum set focusing on children with a particular need, such as children going through a divorce, former child soldiers, or children recovering from abuse.

Offered fall semester (even-numbered years)



## COURSE DESCRIPTIONS

### **CMN 2313 Christian Education with Adolescents Three hours**

A study of teaching and learning theories specifically for those working with adolescents in a Christian environment. Includes adolescent cultural exegesis and its application, plus observation and practice of teaching. Prerequisite: CMN 1213  
Offered spring semester

### **CMN 2373 Principles and Practices of Adventure Education Three hours**

Theories and principles of leadership and experiential education (e.g. transfer of learning, small group development, debriefing/processing, providing appropriate feedback, therapeutic approaches, framing experiences) are applied to program development and implementation for Christian outdoor ministry settings, with special consideration of both traditional and specific populations (e.g. youth-at-risk, chemical dependency, businesses, university orientation programs). Opportunities to develop, lead, and evaluate adventure education experiences are incorporated. Field trip required.

Offered fall semester (odd-numbered years)

### **CMN 2383 Outdoor Living Skills Three hours**

Introduction to basic living skills in wilderness environments. Topics include low-impact camping, food rations planning, clothing, travel techniques, equipment, and navigation. Leave No Trace Certification may be earned. Field trips required. An additional fee associated with this course.

Offered fall semester

### **CMN 2632 Outdoor Leadership: Winter Skills Two hours**

An opportunity for students to experience a safe and educational adventure in the world of the northern Minnesota winter wilderness—its ecology, folklore, history, and exquisite beauty. Through participation in a wilderness dogsled and ski trek, students are engaged in the whole realm of winter travel and adaptive camping skills, including backcountry skiing, snowshoeing, construction of snow shelters, winter ecology, and comfort and safety. Leadership development and ministry opportunities are explored in connection with outdoor adventure pursuits. Field trips required. An additional fee associated with this course. Open to Outdoor Leadership Ministries majors or minors or by consent of instructor. Prerequisite: CMN 2383

Offered upon sufficient request

### **CMN 2642 Outdoor Leadership: Paddlesports Two hours**

Instruction to prepare students for leadership roles in conducting canoeing experiences in camps, adventure programs, and other wilderness settings. Students gain and demonstrate an understanding of necessary canoeing equipment, trip planning and organization, instruction of basic canoeing strokes, implementation of safety procedures, canoe expeditioning skills and group management on canoe expeditions, stewardship practices in wilderness settings, and ministry opportunities through outdoor adventure pursuits. Field trips required. An additional fee associated with this course. Open to Outdoor Leadership Ministries majors or minors or by consent of instructor. Prerequisite: CMN 2383

Offered upon sufficient request

**CMN 2652 Outdoor Leadership: Back Packing** **Two hours**

Instruction to prepare students for leadership roles in conducting backpacking experiences in camps, adventure programs, and other wilderness settings. Students gain understanding of backpacking equipment, trip planning and organization, instruction of basic camping skills, implementation of safety procedures, group management on backpacking trips, stewardship practices in wilderness settings, and ministry opportunities through outdoor adventure pursuits. Field trips required. An additional fee associated with this course. Open to Outdoor Leadership Ministries majors or minors or by consent of instructor. Prerequisite: CMN 2383

Offered upon sufficient request

**CMN 2662 Outdoor Leadership: Top Rope Rock Climbing** **Two hours**

Instruction to prepare students for leadership roles in conducting beginning top rope rock climbing experiences in camps, adventure programs, and other wilderness settings. Emphasis is placed upon site selection, instructor qualifications, assessment of participant skills, proper use and care of equipment, belaying technique, correct use of anchors, climbing site management, stewardship practices in wilderness settings, and ministry opportunities through outdoor adventure pursuits. Field trips required. An additional fee associated with this course. Open to Outdoor Leadership Ministries majors or minors or by consent of instructor. Prerequisite: CMN 2383

Offered upon sufficient request

**CMN 3112 Horsemanship** **Two hours**

Instruction in teaching horse care, handling, and riding techniques to participants of different ages. Safety, stable management, and ministry opportunities through involvement in the "Right Lead" program at New Life Ranch are addressed. Field trips required. Credit available to students other than Outdoor Leadership Ministries majors and minors only by consent of instructor. An additional fee associated with this course. Prerequisite: CMN 2383

Offered upon sufficient request

**CMN 3153 Philosophy and Methods of Outdoor Education** **Three hours**

An examination of effective teaching techniques and administrative programming practices for outdoor experiential education. This course emphasizes development and selection of curriculum and activities appropriate for use in extending the academic classroom to the outdoors. Content is also designed to prepare prospective outdoor education professionals to teach about the outdoor environment in nonformal educational settings. Opportunities to develop, lead, and evaluate outdoor education experiences are incorporated.

Offered spring semester (even-numbered years)

**CMN 3213 Camp Leadership and Management** **Three hours**

An introduction to the philosophy of Christian camping and its place in the spiritual, emotional, and educational development of the person. Attention is given to administration and organization of camp life from counselor training to food purchasing. A local camp, New Life Ranch, hosts the course and serves as a model for observation and learning.

Offered spring semester



**CMN 3253 Foundations and Practice of Children's Ministry**

**Three hours**

Preparation for ministry to children: 1) globally, to address concerns such as HIV/AIDS, child laborers, child labor, children of war, sexually exploited children, and street children; 2) professionally, to explore issues of leadership, including safety and liability concerns, children's ministry models, children with special needs, and job options; and 3) biblically, to examine faith and spiritual development in children from the theological and historical standpoints of four different Christian traditions. Prerequisite or corequisite: BBL 34\_3 or 36\_3

Offered fall semester (odd-numbered years)

**CMN 3263 Discipleship Development and Outdoor Ministry**

**Three hours**

Programming philosophy, theories, and principles for designing, conducting, and evaluating camp and adventure programs focused upon disciplining a variety of clientele in various types of Christian residential and wilderness programs. Field trip required.

Offered fall semester (even-numbered years)

**CMN 3273 Critical Concerns with Children**

**Three hours**

An examination of critical issues facing child advocates, social and ministry workers, educators, and counselors, both globally (children with HIV/AIDS, child laborers, child soldiers, sexually exploited children) and domestically (inner city children, children of divorce, child abuse, and children with special needs such as autism). Theologically, this course focuses especially on justice and mercy issues related to children and God's heart for the fatherless, the orphans, and the powerless.

Offered fall semester (odd-numbered years)

**CMN 3313 Foundations and Practice of Youth Ministry**

**Three hours**

A study of the basic principles of effective youth ministry. The class focuses on formulating theological, theoretical, and practical models for doing youth ministry, whether in a local church or parachurch settings. Credit available only to Youth Ministry majors and minors. Prerequisites: CMN 1213 and 2313

Offered fall semester

**CMN 3323 Youth Ministry Organization and Planning**

**Three hours**

An opportunity for students to develop organizational and planning skills helpful in youth ministry. Building on foundations established in CMN 3313, students examine various approaches to organizing and carrying out youth programs. Open to Youth Ministry majors and minors only. Prerequisites: CMN 1213, 2313, and 3313

Offered spring semester

**CMN 3373 Leadership for Outdoor Adventure Pursuits** **Three hours**

Examination of the implementation of Christian-focused outdoor pursuits programs, planning and leadership components, outdoor adventure-based administrative techniques, leadership competencies, therapeutic/adaptive considerations, and risk management. Field trip required. Prerequisites: CMN 2373 and 2383

Offered upon sufficient request

**CMN 3443 Leading Short-Term Missions Trips** **Three hours**

An opportunity for students to learn about the process of planning, preparing for leading, and debriefing the short-term mission experience.

Offered summer

**CMN 3453 Nurturing Spiritual Development in Children** **Three hours**

An exploration of effective means of nurturing spiritual development in the young. Students are challenged to construct a working definition of children's spirituality, to examine biblical and theological foundations of children's spirituality, and to explore current theories on children's spiritual development.

Offered spring semester (even-numbered years)

**CMN 3463 Youth Culture** **Three hours**

An examination of adolescence from a holistic developmental perspective, studying intellectual, emotional, social, vocational, psychological, and spiritual growth. Students are given opportunity to analyze and interpret American youth culture for the purpose of understanding and ministering to adolescents. Students gain insight into recognizing, evaluating, and counteracting the effects of culture upon youth's self perception, worldview, and understanding of God. Prerequisites: PSY 1013 and CMN 1213 or consent of instructor

Offered spring semester

**CMN 3690 Practicum: Outdoor Pursuits Instruction** **No credit**

Experience in assisting an instructor in one of the outdoor leadership courses. Through the establishment and fulfillment of a learning contract, these student assistants progress through various levels of responsibility in accordance with the instructor's guidance and course needs. Prerequisite: consent of instructor

Offered each semester

**CMN 4113 Wilderness First Responder** **Three hours**

Standards of practice for outdoor professionals providing emergency medical care in remote areas. Consideration of prolonged transport times, severe environments, and the use of portable and improvised equipment. Topics include wilderness trauma and illness, search and rescue operations, and environmental emergencies. Upon successful completion of practical and written exams, students will receive a two-year Wilderness First Responder certificate from the Wilderness Medicine Institute of National Outdoor Leadership School (NOLS) and a two-year American Heart Association Adult Heartsaver CPR certification. An additional fee associated with this course.

Offered summer, upon sufficient request

## COURSE DESCRIPTIONS

### **CMN 4163 Senior Seminar in Outdoor Leadership Ministries**

**Three hours**

A capstone course in Outdoor Leadership Ministries in which students intentionally seek to 1) integrate their previous academic and internship experiences; 2) create a professional portfolio reflecting their academic accomplishments, leadership and ministry experiences, relevant certifications, and work-samples; and 3) demonstrate competence in their discipline—conducting significant research to include investigating specific questions posed by a camp, conference center, mission agency, wilderness program, or other outdoor ministry organization, culminating in a public symposium in which the participants present their findings. Prerequisite: CMN 4653

Offered spring semester

### **CMN 4221 Introduction to Senior Seminar**

**One hour**

This course introduces the student to the fundamentals of research for their Senior Seminar project. Course work includes development of a topic and research methodology.

Offered spring semester

### **CMN 4433 Senior Seminar in Youth Ministry**

**Three hours**

A capstone course in Youth Ministry in which students strive 1) to integrate their previous academic and internship experiences; 2) to complete a professional portfolio of their education, experiences, and work-samples; and 3) to demonstrate competence in their discipline—how to assess needs, find answers, and provide help, information, or advice appropriately; continue personal and professional growth; refine their knowledge base; and increase capacity for personal reflection. Prerequisite: completion of internship

Offered spring semester

### **CMN 4443 Critical Concerns with Adolescents**

**Three hours**

An examination of some of the critical issues facing counselors, youth leaders, social workers, and educators by means of journal reviews, interviews, and computer searches. Students research topics such as teenage suicide, substance abuse, pregnancy and abortion, gangs, sexual/physical abuse, and divorce. (Same as FAM 4443)

Offered spring semester

### **CMN 4463 Senior Seminar**

**Three hours**

A capstone course in family studies in which students 1) integrate their previous academic and internship experiences, 2) demonstrate competence in their discipline, and 3) create a professional vita reflecting their work, academic accomplishments, and leadership experiences. The senior project requires a major study and formal paper written for a professional program (social service organization, church, or ministry agency) that provides family life education and/or service. It is to be taken during the student's final fall semester of study. Prerequisites: senior level standing and completed internship

Offered fall semester (beginning 2010)

### **CMN 4481, 4482, 4483 Selected Topics**

**One to three hours**

Topics are chosen from the areas of Christian Ministries. The student may also do independent study and research under the supervision of the instructor.

Prerequisite: consent of instructor

Offered upon sufficient request

**CMN 4493 Ministering to Families across the Life Span**

**Three hours**

This course addresses psychosocial development, faith development, and other developmental issues of single adulthood, young adulthood, middle adulthood, and older adulthood. The course also addresses the significance of generational identities (e.g. silent generation, boomers, millennials), the importance of cross-generational ties, and the key role of forgiveness in adult and family relationships. A special emphasis on the difficult transitions of young adulthood as well as a unit on grief, death, and dying are included.

Offered spring semester (odd-numbered years)

**CMN 4511, 4512, 4513 Independent Study in Christian Ministry**

**One to three hours**

Supervised exploration of topics of special interest. The course consists of large assignments of reading, regular consultation with the supervising professor, and written analysis of readings. Prerequisites: 15 hours of Christian Ministries and consent of the Christian Ministries Department

Offered upon sufficient request

**CMN 4534 Expedition Leadership**

**Four hours**

The Wilderness Education Association's (WEA) National Standard Program (NSP) for either the Wilderness Steward Certification or the Outdoor Leadership Certification. The NSP involves a full semester of classroom instruction, weekend outings, and the equivalent of a three-week expedition in a wilderness environment. The extended wilderness experiences focus on WEA's leadership philosophy and their 18-point curriculum. The goal is to develop professional Christian leaders who are equipped to use wilderness experiences in the spiritual development of others and who are capable of planning, organizing, and leading a safe and environmentally-sound wilderness expedition as a setting for outdoor ministry. Students who successfully complete all phases of the course will be considered for WEA Outdoor Leadership Certification. An additional fee associated with this course. Prerequisite: CMN 2383

Offered spring semester (odd-numbered years)

**CMN 4544 National Outdoor Leadership School Course**

**Four to twelve hours**

An opportunity to enhance students' professional skills within a wilderness adventure environment. Courses vary in length. Offered in cooperation with the National Outdoor Leadership School. An additional fee associated with this course.

Prerequisite: CMN 2383

Offered each semester, as arranged with OLM advisor

**CMN 4554 Outward Bound School Course**

**Four to twelve hours**

An opportunity to enhance students' personal qualities through wilderness adventure. Courses vary in length. Offered in cooperation with an Outward Bound School.

An additional fee associated with this course. Prerequisite: CMN 2383

Offered each semester, as arranged with OLM advisor

**CMN 4611, 4612, 4613, 4614 Internship in Christian Ministry**

**One to four hours**

Participation in an approved and supervised ministry activity. Credit is available only to majors and minors within the Division of Biblical Studies. May be repeated for credit as needed to fulfill the necessary requirements. Grading: 'S' or 'U'

Offered each semester

## COURSE DESCRIPTIONS

**CMN 4619 Internship in Youth Ministry** **Nine hours**  
A seven-month appointment in which the student serves under a qualified professional in an approved setting. Enrollment is limited to Youth Ministries and Youth and Worship Ministries majors. Grading: 'S' or 'U'  
Offered fall semester

**CMN 4651, 4652, 4653, Internship in Outdoor Leadership Ministries** **One to three hours**  
Practical experience working under a qualified professional in the area of camp and recreation programs and/or outdoor education. May be repeated for credit as needed to fulfill the necessary requirements. Grading: 'S' or 'U'  
Offered each semester

### **COM (Communication)**

**COM 1101 Beginning Radio Practicum** **One hour**  
Participation in supervised entry-level radio experiences. Introduction to typical station policies, methods of operation, and Federal Communication Commission (FCC) regulations.  
Offered each semester

**COM 1112 Freshman Theatre Workshop** **Two hours**  
A study of the technical and theoretical aspects of theatre arts by means of participation in a stage production. This class will be specifically geared to incoming freshmen. A not-for-credit enrollment option is available.  
Offered fall semester

**COM 1123 Broadcasting Performance** **Three hours**  
An introduction to the basics of radio and television announcer performance skills. Includes exercises in pronunciation, script marking and reading, interviewing, newscasts, and ad-lib performance.  
Offered fall semester

**COM 1133 Mass Media and Culture** **Three hours**  
This course provides an overview of different communication media, how each of these has influenced culture and how culture has affected these media. Media include television, newspapers, books, magazines, video games, internet, and others.  
Offered fall semester

**COM 1143 Introduction to Communication Theory** **Three hours**  
The various areas of communication studies are presented to provide students with a broad overview of communication theory. Organizational, small group, health, interpersonal, family, and other communication theories are explored.  
Offered fall semester

- COM 1203 Liberal Arts Foundations for the Musician** **Three hours**  
A writing-intensive study of philosophical issues fundamental to the arts. Historical survey of music literature of the Western world, with emphasis on style, form, appreciation, and application of perception skills. (Same as MUS 1203) Prerequisite or corequisite: EGL 1013  
Offered spring semester
- COM 1233 Audio Production** **Three hours**  
Audio production is an intermediate study of audio production for broadcast radio utilizing Adobe Audition. Additional sound applications for television and film will be discussed. Prerequisites: COM 1101 and 1123  
Offered spring semester
- COM 2083 Masterpieces of Film** **Three hours**  
A study of the attributes, techniques, and philosophies of Hollywood film. Oscar winning films throughout the history of the industry are analyzed, with emphasis on understanding Hollywood's role in shaping society.  
Offered each semester
- COM 2101 Intermediate Radio Practicum** **One hour**  
Five hours of weekly practice in practical broadcast experience on KLRC. Proficiency in announcing, control operation, handling equipment, and other typical radio station duties are developed. Practical experience is offered through live shifts on the university's internet radio station and/or voice-tracking on KLRC. Prerequisite: COM 1101  
Offered each semester
- COM 2111, 2112 Practicum in Journalism** **One or two hours**  
Work as a staff member on a university publication in 1) reporting, proofreading, advertising, editing, photography, and layout on the Threefold Advocate student newspaper or 2) working in other university journalism functions. Prerequisite: COM 2123  
Offered each semester
- COM 2121 Practicum in Forensics** **One hour**  
Students participating on the speech and debate team may take this course for up to three semesters of credit. Students enrolled in the course must compete in both debate and public speaking events.  
Offered each semester
- COM 2123 News Writing I** **Three hours**  
A study of the basic principles of journalism.  
Offered fall semester
- COM 2133 Visual Media** **Three hours**  
A study of the fundamentals of visual media and the interaction between visual artifacts and humans from a communication perspective.  
Offered fall semester (odd-numbered years)
- COM 2153 News Writing II** **Three hours**  
Advanced study in journalistic writing and reporting. Prerequisite: COM 2123  
Offered spring semester



## COURSE DESCRIPTIONS

- COM 2333 Editing** **Three hours**  
Copy editing, headline writing, photo scaling, and newspaper layout. Prerequisite: COM 2123 or consent of instructor  
Offered spring semester
- COM 2423 Broadcast News** **Three hours**  
The study of writing and reporting news for television news environments. The class includes news gathering outside the studio, news package production, newscast package production, and newscast producing. Students will write and produce regularly scheduled newscasts. Prerequisites: COM 1123 and 2123  
Offered fall semester (odd-numbered years)
- COM 2523 Public Speaking** **Three hours**  
Students gain theoretical and applied knowledge of public speaking techniques. Speeches will include extemporaneous, impromptu, informative, persuasive, and rhetorical analysis.  
Offered each semester
- COM 3101 Advanced Radio Practicum** **One hour**  
Five hours of weekly responsibilities at KLRC. Students will develop advanced proficiency in announcing, control room skills, production, promotions, or other related radio station duties. Prerequisites: COM1101, 2101, and consent of instructor  
Offered each semester
- COM 3111, 3112 Advanced Practicum in Journalism** **One or two hours**  
Advanced responsibility as a staff member for a university publication. 1) Reporting, proofreading, photography, advertising, editing and layout of the Threefold Advocate student newspaper. 2) Work in other university journalism functions. Prerequisites: respective experience in COM 2111 or 2112, and consent of journalism advisor  
Offered each semester
- COM 3113 Theatre Workshop** **Three hours**  
A study of the technical and theoretical aspects of theatre arts by means of participation in a stage production. A not-for-credit enrollment option is available.  
Offered spring semester
- COM 3121 Broadcast Sports Practicum** **One hour**  
Five hours weekly in performance and/or production of broadcast sports content for KLRC radio or TV5. May be repeated for credit. Prerequisite: COM 3333  
Offered each semester
- COM 3131 Radio News Practicum** **One hour**  
Five hours weekly in production of news materials for broadcast on KLRC. May be repeated for credit. Prerequisite: COM 2423 or consent of broadcasting advisor  
Offered each semester
- COM 3141 Television Program Assistant** **One hour**  
Assists the faculty supervisor in the operations of TV5. Prerequisites: COM 3333 and consent of instructor  
Offered each semester

**COM 3151 KLRC Program Assistant** **One hour**

Assists the supervisor of KLRC: traffic, music selection, announcing schedules, promotions, and production. Prerequisites: COM 1101, 2101, 3101, and consent of instructor

Offered each semester

**COM 3163 Sales and Promotion** **Three hours**

Sales and promotion is a study of the practice and importance of sales in commercial broadcasting, along with sales and community-focused broadcast promotions. Instruction includes audience analysis, ratings, sales and promotional writing, and other industry self-promotion.

Offered spring semester (odd-numbered years)

**COM 3321 Independent Television/Video Production** **One hour**

Practical experience in television and video production. Students work in consultation with a faculty supervisor to complete independent projects. Prerequisites: COM 3333 and consent of instructor

Offered each semester

**COM 3333 Television Production** **Three hours**

An introduction to television production environments both in and outside of the studio. The class includes exercises and projects in television designed to give students knowledge in both single and multiple camera productions.

Offered spring semester (even-numbered years)

**COM 3353 Public Relations Writing** **Three hours**

Stresses the communication phase of the four-stage public relations cycle with emphasis on all forms of public relations and business communication writing. Prerequisite: COM 2123

Offered fall semester

**COM 3363 Magazine Writing** **Three hours**

Study and practice in writing for contemporary magazines as a staff member or as a free-lance writer. Prerequisite: COM 2123 or consent of instructor

Offered fall semester

**COM 3373 Editorial and Interpretative Writing** **Three hours**

Study and writing of editorials, columns, and other interpretative and analytical articles. Prerequisite: COM 2123 or consent of instructor

Offered spring semester

**COM 3383 History of American Journalism** **Three hours**

A study of the history of journalism in the U.S. with particular emphasis on newspapers, magazines, radio, and television.

Offered upon sufficient request

**COM 3523 Oral Interpretation** **Three hours**

A study of the theory, principles, and techniques of the interpretation of literature for oral performance.

Offered spring semester (even-numbered years)



## COURSE DESCRIPTIONS

- COM 3533 Introduction to Rhetorical Theory** **Three hours**  
The various aspects of rhetorical studies are presented to provide students with a broad overview of rhetorical theory. Classical and contemporary rhetorical techniques are discussed and analyzed for efficacy.  
Offered spring semester (even-numbered years)
- COM 3553 Interpersonal Communication** **Three hours**  
Study and practice of communication skills used in one-on-one interactions between individuals. Emphases include interpersonal perspectives and their effects on individual and group performance. A discussion of the application of Christian principles of relationship formation/maintenance is included.  
Offered spring semester (odd-numbered years)
- COM 3563 Argumentation and Debate** **Three hours**  
Debate theory and argumentation techniques are discussed and practiced leading to actual exhibition debates within the course.  
Offered spring semester (odd-numbered years)
- COM 4113 Student Directed One Act Plays** **Three hours**  
Instruction in the techniques of directing and producing plays, including script analysis, play selection, casting, and approaches to rehearsal. Students direct plays for public performance. Prerequisite: COM 3113 or consent of instructor  
Offered upon sufficient request
- COM 4172 Sports Broadcasting** **Two hours**  
In cooperation with Sportscaster Camps of America, students learn the theoretical and practical aspects of sports broadcasting including baseball, basketball, and football on location in the Long Beach area of California.  
Offered summer
- COM 4223 Electronic-Mediated Communication** **Three hours**  
A study of the nature of electronic-mediated communication by examining its use and effects in interpersonal and broader societal contexts.  
Offered fall semester (even-numbered years)
- COM 4253 Integrated Media** **Three hours**  
A study of the integration and convergence of mass media. Instruction includes an analysis of the integration of print, broadcast, internet and computer technologies, and globalization.  
Offered fall semester (even-numbered years)
- COM 4293 Communication Law and Ethics** **Three hours**  
A case-study approach to recognizing and treating law and ethical problems commonly encountered by media practitioners. Includes consideration of truth-telling, sources of information, invasion of privacy, copyright, regulation of materials produced, and telecommunication regulation.  
Offered spring semester (odd-numbered years)

**COM 4323 Advertising** **Three hours**

Advertising: its economic role, layout, illustrations, copy, color, trademarks, slogans, media, campaign, and testing results. A study of buying motives of consumers and practical applications of preparing advertising copy.

Offered spring semester

**COM 4343 Programming and Management** **Three hours**

Programming and Management is a study of how and why programming decisions are made and how radio and television stations are managed. The course includes audience analysis, ratings, programming formats, FCC regulations, and religious broadcasting.

Offered spring semester (even-numbered years)

**COM 4413 Selected Topics in Broadcasting** **Three hours**

A seminar that offers students the opportunity for critical examination of a particular issue in contemporary electronic media from a Christian worldview. Prerequisite: consent of instructor

Offered upon sufficient request

**COM 4453 Public Relations Planning** **Three hours**

The planning and management of public relations programs with practice in problem-solving and program development. Prerequisite: COM 3353 or consent of instructor

Offered spring semester (even-numbered years)

**COM 4461 Senior Seminar** **One hour**

Specialized study of final career preparation. To be completed during the student's final semester in residence.

Offered each semester

**COM 4463 Internship in Broadcasting** **Three hours**

Practical experience working 150 hours under a qualified professional within the media. Responsibilities are tailored to develop skills in the student's particular area of concentration. Only one internship for credit may apply toward graduation. Prerequisites: junior standing and approval of advisor

Offered each semester

**COM 4473 Internship in Journalism** **Three hours**

Practical experience working under a qualified professional in journalism or public relations. Prerequisites: COM 2123, 2153, 2333, and approval of journalism advisor

Offered each semester

**COM 4483 Internship in Public Relations** **Three hours**

Practical experience working under a qualified professional in journalism or public relations. Prerequisites: COM 2123, 2153, 2333, 3353, junior standing and approval of journalism advisor

Offered upon sufficient request

**COM 4583 Selected Topics in Performance Studies** **Three hours**

Intensive study of a topic in theatre, such as women dramaticists, non-western theatre, large-stage genres, author studies, or creative playwriting. May be repeated for credit when content differs.

Offered upon sufficient request

## COR (Core Curriculum)

### **COR 1002 Gateway Seminar in Christian Scholarship Two hours**

An introduction to the purpose and method of Christian higher education and the distinctive mission of John Brown University through exploration of a particular topic. Must be taken during the student's first semester at JBU.

Offered each semester

### **COR 1012 Wellness Two hours**

A practical study of fundamental health and fitness principles based upon the wellness model. Personal applications to the lifestyle of the individual are emphasized.

Offered each semester

### **COR 1091H Honors: Orientation to the Honors Scholars Program One hour**

A course designed to offer honors students a foundation for "the intellect as a Christian calling" and to introduce them to the opportunities available to them as students in the program (capstone projects, conference presentations, graduate school preparation, prestigious scholarship mentoring, etc.).

Offered fall semester

### **COR 1111 Wellness Activity Selected Topic One hour**

An activity course other than those offered on a regular basis.

Offered upon sufficient request

### **COR 1121 Backpacking/Camping One hour**

An activity course offering instruction in the basic skills involved in backpacking and camping. Topics such as equipment, trip planning, on-trail guidelines, and terminology are covered. A backpacking/camping trip is included.

Offered each semester

### **COR 1131 Tennis One hour**

An activity course designed to provide basic instruction in the game of tennis. Such topics as the history of tennis, equipment, rules and scoring, etiquette, fundamental skills, and strategy are addressed.

Offered each semester

### **COR 1141 Bowling One hour**

An activity course offering instruction in the basics of the game of bowling. Such topics as the history of bowling, equipment and facilities, rules, scoring, fundamental skills, and terminology are addressed. An additional fee associated with this course.

Offered each semester

### **COR 1151 Swimming One hour**

An activity course offering instruction in the basic skills of swimming. Such topics as history, safety, basic techniques, and various strokes are addressed.

Offered upon sufficient request

### **COR 1161 Golf One hour**

An activity course offering instruction in the basics of the game of golf. Such topics as the history of the game, equipment, course layout, fundamental skills, golf etiquette, and terminology are addressed. An additional fee associated with this course.

Offered each semester

- COR 1171 Racquetball** **One hour**  
An activity course offering instruction in the basics of the game of racquetball. Such topics as the history of the game, equipment, rules, playing regulations, fundamental skills, and strategy are addressed.  
Offered each semester
- COR 1181 Aerobic Walking/Jogging** **One hour**  
An activity course offering students the opportunity to learn the basics of walking and jogging for fitness. Shoe selection, running/walking form, training ideas, safety measures, injuries, and terminology are topics covered.  
Offered each semester
- COR 1191 Nautilus and Free Weight Training** **One hour**  
An activity course designed to assist students in developing strength and stretching programs for fitness. Proper lifting techniques, training programs, and specific exercises for development of strength and endurance are covered.  
Offered each semester
- COR 2233 Lifeguarding** **Three hours**  
Knowledge and advanced skill in swimming with training in lifeguarding. Prerequisite: advanced swimming skills.  
Offered upon sufficient request
- COR 2591H, 3591H Honors: Colloquium** **Each course, one hour**  
A course offering honors students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Each may be repeated for up to three hours of credit.  
Offered upon sufficient request
- COR 3093H, 4093H Honors: Integrated Humanities I, II** **Each course, three hours**  
A six-hour course sequence studying the development of human thought and expression from the perspective of the arts, literature, and philosophy. Using a basically chronological approach, students study the dominant artforms in their philosophical contexts, seeking to develop an integrated understanding of human history and the relationship between ideas and the arts. Students are exposed to the writings of important philosophers and great works of literature, music, and the visual arts. The course requires participation in relevant arts activities in the surrounding area, and students are encouraged to support and become involved in community arts programs as a means of developing a lifelong commitment to the arts. Prerequisites: admission to the Honors Program or permission of the Honors Committee, EGL 1023, HST 1013, and 1023 (or Honors counterparts)  
3093H offered fall semester (even-numbered years)  
4093H offered spring semester (odd-numbered years)
- COR 3691H, 3692H, 3693H Honors: Practicum** **One to three hours**  
Experiences in Honors Scholars Program leadership, such as serving on executive council, coordinating annual research symposium, assisting professors with Gateway Seminar, etc.  
Offered each semester

**CS (Computer Science)****CS 1113 Introduction to Computing** **Three hours**

An introduction to algorithmic problem solving in the context of a modern programming language. Such topics as problem-solving strategies, basic data structures, data and procedural abstraction, and algorithm complexity are discussed. Three hours lecture-discussion per week. Prerequisite: MTH 1113 or equivalent

Offered fall semester

**CS 3213 Computer Architecture** **Three hours**

A study of design alternatives in computer architecture. Instruction set architectures, memory subsystems organization, interfacing concepts, and issues arising in managing communication with the processor are covered. Three hours lecture-discussion per week. Prerequisite: CS 1113

Offered spring semester

**ECN (Economics)****ECN 2003 Basic Economics** **Three hours**

An introduction to the basic concepts of economics including microeconomics, macroeconomics, personal finance, economics ethics, and economic history.

Offered fall semester

**ECN 2043 Economies of the European Union** **Three hours**

Introduction to micro- and macroeconomic issues through consideration of the Irish economy and the larger environment of the United Kingdom and the European Union. Students have the opportunity to meet leading business and trade union figures in Ireland and to visit industrial development bodies and financial and business organizations, with a view to become conversant in economic theories and their application to decision-making in private and public sector organizations.

Offered summer, Irish Studies Program

**ECN 2093H Honors: Basic Economics** **Three hours**

A study of the market economy and the government's role in maintaining economic stability. Designed to equip the student with an information base needed for effective stewardship and for working within the political process to promote economic progress. Extensive use of individual, team, and class projects. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered spring semester (odd-numbered years)

**ECN 2113 Principles of Microeconomics** **Three hours**

A study of markets and how supply and demand interact to direct the allocation of resources and final goods and services. Related topics include market structure, the role of competition, and the shortcomings as well as virtues of a market approach.

Offered fall semester

**ECN 2123 Principles of Macroeconomics** **Three hours**

A study of the market-oriented economy as a whole with emphasis on the U.S. economy. Topics include national income accounting, determination of national output and employment levels, the banking system, monetary theory, and stabilization policy. Macroeconomic issues such as inflation, unemployment, public debt, economic growth, and the balance of payments are considered from various theoretical positions.

Prerequisite: ECN 2113

Offered spring semester

**ECN 2533 Economics and Society of Central America**

**Three hours**

Using the setting of Antigua, Guatemala, students gain understanding of major economic and social issues facing the Central American region. Topics include distribution of wealth and income, unemployment and poverty, discrimination and class struggle, microenterprise, cultural identity, women's issues, and community development.

Offered summer, Guatemala Studies Program

**ECN 2543 Economics and Society of Ireland**

**Three hours**

On-location study of major economic and social issues facing Ireland, and by extension the European Union. Using primary text, *The Economics of European Integration*, students gain understanding of topics such as distribution of wealth and income, unemployment, economic and monetary union, common markets, cultural identity, and conditions for balanced growth. Other texts and class activities apply theories and insights to the Irish situation.

Offered summer, Irish Studies Program

**ECN 3133 Money and Banking**

**Three hours**

An examination of the U.S. banking system and the role it plays in providing for efficient exchange in the marketplace. Course discussions emphasize the roles of commercial banks, the Federal Reserve, and the U.S. Treasury in determining interest rates, and the general well-being of the U.S. financial network. Also included is a review of monetary policy as a basis for policies to achieve the national economic goals of price stability, full employment, and balance of international payments.

Prerequisite: ECN 2123

Offered spring semester

**ECN 3203 Economic Development**

**Three hours**

Study of processes and strategies of economic development with an emphasis on developing countries. Application of economic theories leading to an understanding of development policies. Prerequisite: ECN 2123

Offered fall semester (odd-numbered years)

**ECN 3213 Managerial Economics**

**Three hours**

Application of microeconomic theory and analysis to business and administrative problems with an emphasis on sound, ethical decision-making. Topics include demand analysis, production and cost analysis, market structures and pricing practices, regulation, risk, and capital budgeting. Prerequisite: ECN 2123

Offered fall semester (even-numbered years)

**ECN 3223 Comparative Systems**

**Three hours**

A study of the contrast between the extremes of command and market-driven economies. Comparisons are drawn from theological as well as ideological and theoretical perspectives. Selected real-world economic systems are analyzed. Prerequisite: ECN 2123

Offered spring semester (even-numbered years)



## COURSE DESCRIPTIONS

### **ECN 4103 International Economics** **Three hours**

A study of the economic foundation on which the global economy rests, with an emphasis on the role of the U.S. economy. Topics include trade theory, trade restrictions, monetary systems, exchange rates, and the effect of domestic economic policies on global trade patterns. Also addressed are trade issues such as trade deficits, job displacement, economic sanctions, emerging nations, environmental concerns, immigration, and currency crises. Prerequisite: ECN 2123

Offered fall semester

### **ECN 4131, 4132, 4133 Selected Topics** **One to three hours**

A study of subjects of special interest. May be offered as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor

Offered upon sufficient request

### **ECN 4993 Senior Research Project** **Three hours**

Individual, intensive study and presentation of an approved topic. This project is integrative in nature and is to be completed during the student's final year of study. Prerequisites: senior standing and consent of instructor

Offered spring semester

## **ED (Education)**

### **ED 1114 Educational Foundations and Technology** **Four hours**

A course designed to welcome students to the field of education. Includes an overview of cultural and historical foundations of American public education, emphasizing its relationship to a diverse society. Design, production, utilization, and evaluation of various instructional technologies are incorporated, including ISTE principles for teachers. Classroom presentation techniques, John Brown University Education distinctives, and professional development are stressed. The on-going professional portfolio is begun. Field experience/assignments required.

Offered each semester

### **ED 2113 Human Growth and Development** **Three hours**

A foundational course dealing with physical, mental, emotional, social, and cultural aspects of individual development from prenatal through adolescence. Emphasis is placed on the Piagetian Stages and sociocultural theory. Field assignments require the observation of children from early childhood through adolescence with emphasis on cultural diversity.

Offered spring semester

### **ED 2133 Educational Psychology** **Three hours**

Psychology applied to teaching and learning covering such topics as motivation, retention, reinforcement, transfer, maturation, socialization, and individual differences relative to cultural and environmental influences. Field and/or clinical experiences are required. Prerequisites: admission to Field Experience (Gate One), ED 1114, and 2113

Offered each semester

**ED 2713 Education of the Exceptional Student** **Three hours**

Orientation to the types of exceptionalities in children including those with pervasive cognitive delays, specific learning disabilities, emotional disturbances, other health impairments, lower SES considerations, giftedness, and culturally and linguistically diverse factors. This course includes an overview of the legal responsibilities and support systems necessary to provide services for these various populations. Designed to orient candidates to the diverse learning needs within the classroom. Field experience is required. Prerequisites: admission to Field Experience (Gate One); ED 2113 or consent of instructor Prerequisite or corequisite: ED 2133

Offered spring semester

**ED 3121 Educational Communications** **One hour**

Designed to provide candidates with the various communication skills including verbal and non-verbal required for the classroom. Emphasis is placed upon effectively communicating in public speaking with students, colleagues, parents, and other members of the public or professional community. Cultural and linguistic diversity factors are addressed. Field experience required. Prerequisite: admission to Education Program (Gate Two)

Offered fall semester

**ED 3153 Reading in the Content Areas** **Three hours**

Secondary (7-12) candidates study assessment and instructional strategies designed to facilitate effective teaching of their content as well as the comprehension and effective use of content materials for all students, including those ELL's and those with special needs. Methods are provided whereby candidates evaluate the appropriateness of content materials and the learning needs of their students. Candidates must collaborate with a peer in developing a detailed, integrated unit that focuses on content instruction and includes learning objectives, appropriate use of teaching strategies, and assessment. Lab and field experiences are required. Prerequisites: admission to Education Program (Gate Two), ED 2113, and 2133. Prerequisite or corequisite: ED 3183

Offered spring semester

**ED 3161 Speech and Language Development of Young Children** **One hour**

Introduction to normal speech and language development. Information regarding the theoretical foundations of speech and language development is provided. Emphasis is placed upon acquisition and development in the early years, birth through five years. A language case-study is required. Prerequisite: admission to Education Program (Gate Two) Corequisite: ED 3362

Offered fall semester

**ED 3183 Educational Assessment** **Three hours**

An investigation of the principles of assessment, including assessments for the culturally and linguistically diverse classroom. Emphasis placed on relating objectives to assessment and the use, construction, and analysis of assessments in the educational setting. Candidates practice creating and/or utilizing a variety of assessment formats including, but not limited to: pre and post, diagnostic, formative, summative standardized, performance, and other authentic assessments. Prerequisites: admission to Field Experience (Gate One) and ED 2133

Offered each semester



## COURSE DESCRIPTIONS

### **ED 3254 Fine Arts for Early Childhood Teachers** **Four hours**

An exploration of the fine arts related to the P-4 curriculum. The course includes ways to integrate the curriculum content using the visual arts, music, movement, and creative dramatics. Students learn and practice methodology used to plan and present lessons, participate in lessons and activities, and observe the teaching of fine arts in the school system. Prerequisites: ED 2113 and 2133

Offered fall semester

### **ED 3263 Foundations of Early Childhood Education and Preschool Field Experience** **Three hours**

The study of the philosophical and historical foundations of early childhood education. This course also includes the study of the physical, cognitive, social, spiritual, and emotional needs of young children. Eighteen hours of pre-school field experience (including Head Start) are required. Prerequisites: admission to Field Experience (Gate One) and ED 2113

Offered fall semester

### **ED 3273 Curriculum and Instruction: Early Childhood Education** **Three hours**

A course designed to provide for the study of the curriculum, teaching methods, materials, equipment, and classroom management procedures which can be used to enhance the learning experiences of preschool and kindergarten age children. Course focuses on integrated learning and includes eighteen hours of field experience in a kindergarten classroom and at a school for special needs students. Prerequisites: admission to Education Program (Gate Two); ED 2133, 3263, 3353, 3371, 3373, and 3393 Prerequisite or corequisite: ED 3183

Offered spring semester

### **ED 3353 Instructional Methods, 1-8** **Three hours**

Emphasizes the application of effective teaching skills. Includes experiences with several teaching models appropriate for students of diverse backgrounds and special needs. Social studies standards, methods, and materials are incorporated throughout the course. Developmental strategies for teaching mathematical concepts such as graphs, timelines, etc. are included. Field experience required. Prerequisites: admission to Field Experience (Gate One), ED 2113, and 2133

Offered each semester

### **ED 3362 Curriculum and Instruction: Language Arts, P-4, 4-8** **Two hours**

Materials and methods of teaching language arts in P-4 and 4-8 classrooms. The four components of a Language Arts curriculum are addressed, as well as methods and materials to be used in facilitating learning in the areas of these four components. Emphasis is placed upon the use of these tools in all areas of the curriculum including math, science, and social studies. Course is restricted to students admitted to the P-4 and 4-8 early childhood licensure program. Lab experience required. Prerequisites: admission to Education Program (Gate Two), ED 1114, 2113, and 2133 Prerequisites or corequisites: ED 3183 and 3353. Corequisites: ED 3371, 3373, and 3393 Corequisite for P-4: ED 3161

Offered fall semester

**ED 3371 Curriculum and Instruction: Reading I, 4-8 One hour**

Middle school candidates become familiar with various models of reading instruction and the theories that support those models of the reading process. This course provides an overview of instruction and assessment and is designed to encompass both theoretical and practical aspects of learning how to teach reading in grades 4-8. Restricted to teacher candidates admitted to the 4-8 middle school licensure program. Field and/or lab experiences are required. Prerequisites: admission to Education Program (Gate Two), ED 2113, and 2133. Prerequisites or corequisites: ED 3183 and 3353 Corequisites: ED 3362 and 3393

Offered fall semester

**ED 3373 Curriculum and Instruction: Reading I, P-4 Three hours**

Preschool through fourth grade (P-4) candidates will become familiar with various literacy models of reading instruction and the theories that support those models. This course provides an overview of instruction and assessment and is designed to encompass both the theoretical and practical aspects of learning how to teach reading in grades P-4, with an emphasis on balanced literacy. Included are studies of the stages of reading development and word identification strategies including phonics, fluency, comprehension strategies, assessment, and technological strategies. Field experience required. Prerequisites: admission to Education Program (Gate Two), ED 2113 and 2133 Prerequisites or corequisites: ED 3183 and 3353 Corequisites: ED 3161 and 3362

Offered fall semester

**ED 3383 Curriculum and Instruction: Arithmetic, P-8 Three hours**

Methods and materials for teaching arithmetic (based upon NCTM standards) with diverse students in grades P-4 and 4-8. Emphasis is placed on constructivist principles and the use of mathematics manipulatives. Field and lab experiences are required. Prerequisites: admission to Education Program (Gate Two), ED 2113, 2133, 3183, 3353; MTH 2143, and 2183 Corequisites: ED 4373 and GSC 3103 Prerequisite or corequisite: taking Content Knowledge component of Praxis II

Offered spring semester

**ED 3393 Children and Adolescent Literature Three hours**

A study of the literature that might be read and studied by elementary and/or middle school students. Includes a study of the foundations of literature for children and a study of a variety of literary selections from notable children's books (especially Newbery, Caldecott, and Coretta Scott King award winners). Also includes a study of multicultural literature. Corequisites: ED 3161, 3362, 3371, and 3373

Offered fall semester

**ED 3563 Second Language Acquisition for Teachers**

**Three hours**

A study of major theories in second language acquisition with emphasis on contrastive principles of first and second language development. Special attention is given to second language acquisition implications in K-12 classrooms with culturally and linguistically diverse learners. Candidates are introduced to the dynamics of the educational process along with social, cultural, and economic considerations, which affect second language development. Field experience required. Prerequisite or corequisite: ED 2133

Offered fall semester

## COURSE DESCRIPTIONS

### **ED 3583 Curriculum and Instruction: TESOL** **Three hours**

Methods and materials for teaching English to non-English speakers. Classroom strategies are addressed for teaching English in a variety of settings. The unique characteristics and needs of the K-12 program, adult community education, and English for academic purposes (IEP) are addressed. Candidates develop skills in the evaluation, selection, and implementation of appropriate ESL materials, teaching strategies, placement, and assessment. Field experience required. (Same as EGL 3583) Prerequisites: admission to field experience (Gate One) and ED 3563

Prerequisite or corequisite: ED 2133

Offered spring semester

### **ED 3763 Behavior Management** **Three hours**

Focuses on various techniques for the changing/managing of behavior for P-8. Emphasis on analysis of behavioral needs and the design of appropriate classroom management strategies. Designed to meet the needs within the resource room as well as the grade level/inclusion classroom. Prerequisites: ED 2113 and 2133

Offered spring semester

### **ED 3861, 3862 Field Experience in a Multicultural Environment**

**One or two hours**

An opportunity to develop practical teaching skills while working with children in another culture. Under the direction of the program supervisor, participants plan and implement teaching strategies in various subject areas including science, math, literacy, sports, music, and basic tenets of Christianity. Students participate in a formal presentation of the program, maintain a daily log, and develop a paper outlining what they have learned. One credit hour is earned for each three weeks of participation.

Offered summer

### **ED 3903 Teaching in the Christian School** **Three hours**

An introduction to the history, philosophy, organization, and function of private Christian schools. The various curricular plans and methods are considered. Meets ACSI certification requirements. Prerequisites: admission to Education Program (Gate Two), ED 2113, and 2133

Offered upon sufficient request

### **ED 4373 Curriculum and Instruction: Reading II** **Three hours**

Procedures and methods to be used in analyzing and diagnosing reading difficulties, as well as appropriate strategies to be used to assist students with reading problems. Also addressed are skills and strategies necessary for reading content material. Candidates must submit an integrated unit plan that includes lesson plans, learning objectives, handouts, transparencies, the use of technology, and assessment. Clinical experiences in the areas of diagnosis of reading difficulties and the teaching of reading in all areas of the curriculum as well as participation in an integrated lab are required. Prerequisites: admission to Education Program (Gate Two), ED 3371 and 3373 Corequisites: ED 3383 and GSC 3103 Prerequisite or corequisite: taking Content Knowledge component of Praxis II

Offered spring semester

**ED 4563 Curriculum and Instruction: Middle School Three hours**

A consideration of the philosophy and goals of the middle school movement, characteristics of the middle school student, classroom management, curriculum designs, and learning activities and strategies designed especially for the young adolescent. Course includes field and/or clinical experiences. Prerequisites: passing Content Knowledge component of Praxis II, admission to Education Program (Gate Two), ED 2113, 2133, and 3153 or 3353 Prerequisite or corequisite: ED 3183

Offered fall semester (even-numbered years)

**ED 4663 Curriculum and Instruction: Secondary English Three hours**

A consideration of the secondary school English curriculum, teaching strategies, and utilization of instructional materials. Supporting topics include best teaching practices and classroom management. Field experiences/assignments consist of a minimum of 50 hours of classroom experience with secondary English teachers. Prerequisites: passing Content Knowledge component of Praxis II, admission to Education Program (Gate Two), ED 2113, 2123, 2133, 2713, 3153, and 3183

Offered fall semester

**ED 4673 Curriculum and Instruction: Secondary Mathematics Three hours**

A consideration of the secondary school Mathematics curriculum, teaching strategies, and utilization of instructional materials. Supporting topics include best teaching practices and classroom management. Field experiences/assignments consist of a minimum of 50 hours of classroom experience with secondary Mathematics teachers. Prerequisites: passing Content Knowledge component of Praxis II, admission to Education Program (Gate Two), ED 2113, 2133, 2713, 3153, and 3183

Offered fall semester

**ED 4693 Curriculum and Instruction: Secondary Social Studies Three hours**

A consideration of the secondary school Social Studies curriculum, teaching strategies, and utilization of instructional materials. Supporting topics include best teaching practices and classroom management. Field experiences/assignments consist of a minimum of 50 hours of classroom experience with secondary Social Studies teachers. Prerequisites: passing Content Knowledge component of Praxis II, admission to Education Program (Gate Two), ED 2113, 2133, 2713, 3153, and 3183

Offered fall semester

**ED 4850 Internship: Early Childhood Education Fourteen hours**

Interns are assigned to primary school(s) full-time to work under the joint supervision of an experienced classroom teacher and a university faculty member. Senior standing and Division of Education approval required. Division of Education approval of Gate Three requirements including an interview and review of the program portfolio.

Prerequisites: verification of having passed Content Knowledge component of Praxis II, admission to Internship (Gate Three), ED 2713, 3183, 3263, 3273, 3353, 3373, 3383, and 3763 Corequisite: ED 4851

Offered each semester

## COURSE DESCRIPTIONS

**ED 4851 Seminar: Early Childhood Education** **One hour**

Discussion of problems and concerns encountered during Internship. Designed to bring professional theory and practice into a working perspective. Includes basic concepts of classroom management, safety, legal, and ethical issues affecting teaching, working with parents, portfolio assessment, current school issues, and cultural diversity. Corequisite: ED 4850

Offered each semester

**ED 4860 Internship: Middle School** **Fourteen hours**

Interns are assigned to a middle school and elementary school full-time to work under the joint supervision of an experienced classroom teacher and a university faculty member. Senior standing and Division of Education approval of Gate Three requirements including an interview and review of the program portfolio.

Prerequisites: verification of having passed Content Knowledge component of Praxis II, admission to Internship (Gate Three), ED 2713, 3183, 3353, 3362, 3371, 3383, 3763, 4373, and 4563 Corequisite: ED 4861

Offered each semester

**ED 4861 Seminar: Middle School** **One hour**

Discussion of problems and concerns encountered during Internship. Designed to bring professional theory and practice into a working perspective. Includes basic concepts of classroom management, safety, legal, and ethical issues affecting teaching, working with parents, portfolio assessment, current school issues, and cultural diversity. Corequisite: ED 4860

Offered each semester

**ED 4880 Internship: Secondary** **Fourteen hours**

Interns are assigned to a secondary school full-time to work under the joint supervision of an experienced classroom teacher and a university faculty member. Senior standing and Division of Education approval of Gate Three requirements including an interview and review of the program portfolio. Prerequisites: verification of having passed Content Knowledge component of Praxis II, admission to Internship (Gate Three), ED 2713, 3153, 3183, Curriculum and Instruction course for teaching field, and any endorsement prerequisites Corequisite: ED 4881

Offered each semester

**ED 4881 Seminar: Secondary** **One hour**

Discussion of problems and concerns encountered during Internship. Designed to bring professional theory and practice into a working perspective. Includes basic concepts of classroom management, safety, legal, and ethical issues affecting teaching, working with parents, portfolio assessment, current school issues, and cultural diversity. Corequisite: ED 4880

Offered each semester

**ED 4890 Internship: P-12** **Fourteen hours**

Interns are assigned to elementary and secondary schools full-time to work under the joint supervision of experienced classroom teachers and a university faculty member. Senior standing and Division of Education approval of Gate Three requirements including an interview and review of the program portfolio.

Prerequisites: verification of having passed Content Knowledge component of Praxis II, admission to Internship (Gate Three), ED 2713, 3183, Curriculum and Instruction course for teaching field Corequisite: ED 4891

Offered each semester

**ED 4891 Seminar: P-12** **One hour**

Discussion of problems and concerns encountered during Internship. Designed to bring professional theory and practice into a working perspective. Includes basic concepts of classroom management, safety, legal, and ethical issues affective teaching, working with parents, portfolio assessment, current school issues, and cultural diversity. Corequisite: ED 4890

Offered each semester

**ED 4901, 4902, 4903 Selected Topics** **One to three hours**

An intensive study of a selected area of the school curriculum designed to meet the particular needs of pre-service and in-service teachers or administrators. Specific subtitles may be added. Division of Education approval required.

Offered each semester

## **EE (Electrical Engineering)**

**EE 2213 Digital Electronics** **Three hours**

A study of bipolar and MOS switching circuits, combinational and sequential logic design, and programmable logic devices. Includes a design component. Two hours lecture-discussion and one two-hour laboratory per week.

Offered fall semester

**EE 2223 Electrical Circuits** **Three hours**

A study of electrical circuits using Ohm's law, Kirchoff's laws and Thevenin's and Norton's theorems including time and frequency domains. First and second order circuits are studied including RC, RL, and RLC components. Three hours lecture-discussion per week. Prerequisites: EN 1122 and MTH 2114

Offered spring semester

**EE 3313 Electronics I** **Three hours**

A study of diodes and transistors, including BJTs and FETs and the circuits that use them. Topics include biasing, rectifiers, limiters, clamps, amplifiers and switches, and operational amps. Two hours lecture-discussion and one three-hour laboratory per week. Prerequisite: EE 2223

Offered fall semester

**EE 3323 Digital Systems** **Three hours**

A continuation from EE 2213 of the design and analysis of digital systems with particular emphasis in one or more areas of application. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisites: EE 2213 and EE 3313

Offered fall semester

**EE 3423 Signal Processing** **Three hours**

Includes signal representation, Fourier techniques, convolution, correlation, AM, PM, and FM modulation, spectral density, filter synthesis, and signal control. Includes a design project. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 2223

Offered spring semester



## COURSE DESCRIPTIONS

- EE 3501, 3502, 3503 Selected Topics** **One to three hours**  
A study of a special area of electrical engineering such as computer design, microprocessor applications, antennas, transmission line applications, power electronics, active filters, electric motor design, or direct energy converters. May also be used as internship credit or independent study. Prerequisite: consent of department head  
Offered upon sufficient request
- EE 4123 Electromagnetics** **Three hours**  
Application of Maxwell's equations to transmission lines, waveguides, and antennas. Includes antenna design. Three hours lecture-discussion per week. (Same as PHY 4123) Prerequisite: EN 3313  
Offered spring semester
- EE 4203 Fiber Optic Communication** **Three hours**  
A study of fiber optic communications including the optical channel, fiber optic sources, and receivers. Includes the study of LEDs, lasers, p-n and pin diodes, photodiodes, and APDs. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EN 3313  
Offered upon sufficient request
- EE 4213 Electronics II** **Three hours**  
A study of the analysis and design of electronic circuits using diodes, BJTs and FETs. Topics include low and high frequency effects, power amps, oscillators, filters and converters. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 3313  
Offered upon sufficient request
- EE 4303 Digital Signal Processing** **Three hours**  
Theory and techniques of characterizing discrete time signals. Includes Fourier and Z-transform, flow graphs, digital filter design, quantization effects, and spectral estimation. Includes a design component. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 2223  
Offered upon sufficient request
- EE 4403 Advanced Digital Systems** **Three hours**  
Topics may be selected from advanced logic design, coding, digital filters, computer systems, digital communications, or digital control. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 3323  
Offered upon sufficient request
- EE 4413 Digital Communications Theory** **Three hours**  
Study of digital communications systems may include such topics as QAM, FSK, CPM, M-ary, PSK, ISI, coding theory, or correction theory/coding. Lab implements various communications in digital form. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 3423  
Offered fall semester
- EE 4503 Data and Computer Communications** **Three hours**  
A study of data transmission, encoding, multiplexing, networking, circuit and packet switching, and local and wide area networks. Also computer communication architecture including networking and protocols. Includes a design component. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisites: CS 1113 and EE 2213  
Offered upon sufficient request

**EE 4703 Antennas**

**Three hours**

A study of antenna systems including the monopole, dipole, loop, helical, microstrip antennas, and parabolic dish, as well as arrays. The course covers the topics of radiation pattern, directivity, gain, efficiency, impedance tuning, and an introduction to propagation. Includes antenna system design. Three hours lecture-discussion per week. Prerequisite: EN 3313

Offered upon sufficient request

**EGL (English)**

**EGL 1013 English I: Composition**

**Three hours**

Writing in a variety of modes and styles for different audiences and purposes. The sequence of written assignments builds on writing from personal experience and gradually integrates perspectives from published sources. A short, research-based essay is required.

Offered each semester

**EGL 1023 English II: Literary Analysis and Research**

**Three hours**

An introduction to the analysis of literary texts through reading and researching a selection of short stories, poems, dramas, and novels. In addition to essays of analysis of such works, a substantial research paper is required. Prerequisite: EGL 1013

Offered each semester

**EGL 1083H Honors: English I, Composition**

**Three hours**

A course which has as its thematic core the ethnographical study of local cultures. Focus is on primary and secondary research methods, problem solving, and speaking skills. Methods include experiential, reflective, integrative, and collaborative learning, and teaching by way of field experiences, group projects, interviews, guest speakers, and seminar-type participation. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered fall semester

**EGL 1093H Honors: English II, Literary Analysis and Research**

**Three hours**

An introduction to the analysis of literary tests, including poetry, drama, short fiction, and the novel. Methods may include collaborative learning, field experience, group projects, guest speakers, and seminar-type participation. Assignments will include analysis and response to literary texts and a short documented scholarly research paper, leading up to a longer research project in which the student works with a selected text, the author of that text, and secondary sources to analyze the production of texts in context. Prerequisites: admission to the Honors Program or permission of the Honors Committee and EGL 1013 or Honors equivalent

Offered spring semester

**EGL 2213 World Literature I**

**Three hours**

Readings from the major writers of the Western World from antiquity through Renaissance. Includes readings from related non-Western literature. A scholarly paper is required. Prerequisite: EGL 1023

Offered fall semester (odd-numbered years)



## COURSE DESCRIPTIONS

### **EGL 2223 World Literature II** **Three hours**

Readings from writers of the Western World from the Enlightenment through the contemporary period. Includes readings from related non-Western literature. A scholarly paper is required. Prerequisite: EGL 1023

Offered spring semester (even-numbered years)

### **EGL 2243 Young Adult Literature** **Three hours**

An introduction to young adult literature as a genre, including an overview of the history of the field, experiences with representative samples of the literature, and guidelines to be used in the promotion and evaluation of such works for use in the classroom and family settings.

Offered spring semester

### **EGL 2393 Advanced Composition** **Three hours**

Rhetorical techniques and practice in different styles of writing. The course provides an overview of rhetoric and composition pedagogy with emphasis on various professional and educational conventions for writing. Assignments include exercises on the rhetorical effects of diction, grammatical construction, syntax, and paragraph organization; a sequence of written documents in various writing modes; lesson plans and oral presentations on editing or composing academic essays; and participant-observations in Writing Center consultation. Prerequisite: EGL 1023 or equivalent

Offered spring semester

### **EGL 3313 Medieval Literature** **Three hours**

A study of early English literature from the Anglo-Saxon period through the fifteenth century. Authors may include Chaucer, Langland, and Kempe; anonymous works may include *Beowulf*, *The Dream of the Rood*, and *Sir Gawain and the Green Knight*. Most works are read in translation; however, the course introduces students to broad concepts in the history of the English language. A scholarly paper is required.

Prerequisite: EGL 1023 or equivalent

Offered fall semester (odd-numbered years)

### **EGL 3321 Writing Center Practicum** **One hour**

Experience in Writing Center methods through participant-observation, readings, and periodic staff meetings. Three hours of tutoring (peer reviews and grammar advice on student writing) each week and a weekly memo are required, plus web reports on each shift. Prerequisites or corequisites: EGL 2393 and 3363

Offered each semester

### **EGL 3323 Renaissance Literature** **Three hours**

A study of the masterpieces from the English Renaissance. A scholarly paper is required. Prerequisite: EGL 1023 or equivalent

Offered spring semester (even-numbered years)

### **EGL 3333 Shakespearean Drama** **Three hours**

Representative comedies, tragedies, histories, and romances. A scholarly paper is required. Prerequisite: EGL 1023 or equivalent

Offered spring semester (odd-numbered years)

**EGL 3341 Literary Magazine Practicum** **One hour**  
Working with the production of a literary magazine, including editing, formatting, and writing.

Offered spring semester (odd-numbered years)

**EGL 3343 Restoration and Eighteenth Century Literature** **Three hours**  
A study of the major writers, genres, and issues of this period. Authors may include Dryden, Behn, Pope, Richardson, Johnson, and Burney; issues may include British colonialism and slavery, the rise of the novel, and the beginnings of British feminism. A scholarly paper is required. Prerequisite: EGL 1023 or equivalent

Offered fall semester (even-numbered years)

**EGL 3353 Nineteenth Century British Literature** **Three hours**  
A study of the major British writers of the Romantic and Victorian periods. A scholarly paper is required. Prerequisite: EGL 1023 or equivalent

Offered spring semester (odd-numbered years)

**EGL 3363 Advanced English Grammar** **Three hours**  
An intensive study of the systems of English grammar and an introduction to the history of the English language. Prerequisites: EGL 1023 and junior standing

Offered fall semester

**EGL 3583 Curriculum and Instruction: TESOL** **Three hours**  
Methods and materials for teaching English to non-English speakers. Course addresses classroom strategies for teaching elementary children through adults survival English, and English for other specific purposes. Includes the skills to evaluate, select, access, and implement appropriate ESL materials and teaching strategies. (Same as ED 3583) Prerequisite: ED 2133

Offered upon sufficient request

**EGL 3713 Literary Theory** **Three hours**  
A study of the primary texts of literary criticism and aesthetics from Plato to the present. Focuses on developing knowledge and application of the various ideas from the different schools of thought. Prerequisites: EGL 1013, 1023, and one upper-level literature course. Prerequisite or corequisite: RPH 3003

Offered fall semester (odd-numbered years)

**EGL 4003 Masterpieces of Literature** **Three hours**  
Selections from ancient to contemporary world literature in drama, prose, and poetry. A capstone of the Core Curriculum. Prerequisites: EGL 1023, HST 1013, 1023, and RPH 3003

Offered each semester

**EGL 4043 Masterpieces of Literature: Ireland** **Three hours**  
A reading-intensive overview of the literary history of Ireland through examination of selected works of writers William Butler Yeats, Oscar Wilde, George Bernard Shaw, James Joyce, C.S. Lewis, and others. A scholarly paper is required. May substitute for EGL 4003 in the Core Curriculum. Prerequisites: EGL 1023, HST 1013, and 1023

Offered summer, Irish Studies Program

## COURSE DESCRIPTIONS

- EGL 4111 Careers for English Majors** **One hour**  
A seminar that explores the world of work as it relates to the skills developed in the English program and the individual strengths of the students. Prerequisite: senior standing  
Offered fall semester
- EGL 4413 American Literature to 1900** **Three hours**  
Major American writers from colonial times through the nineteenth century. A scholarly paper is required. Prerequisite: EGL 1023 or equivalent  
Offered fall semester (even-numbered years)
- EGL 4453 Senior Seminar** **Three hours**  
Independent investigation of an area that is not covered in depth in other departmental offerings. A scholarly paper is required. Prerequisite: senior standing, or junior standing and consent of instructor  
Offered fall semester
- EGL 4473 Selected Topics: Creative Writing** **Three hours**  
Instruction in a designated genre or subgenre of writing, such as poetry, fiction, playwriting, creative non-fiction, memoir, biography, or writing about faith. A scholarly paper is required. May be repeated for credit when content differs. Prerequisite: EGL 2393; or for non-majors: junior standing and consent of instructor  
Offered spring semester
- EGL 4483 Selected Topics: Literature** **Three hours**  
An in-depth study of a literary topic of interest. Options: a. Author, b. Period, c. Genre, d. Topic. A scholarly paper is required. Topics will be chosen from a wide variety of possibilities stemming from the interest of the professor or from requests by students. Prerequisite: EGL 1023 or equivalent  
Offered each semester
- EGL 4493 Composition Theory** **Three hours**  
A study of the history and development of writing as an academic discipline with emphasis on how various aspects and styles of writing are valued, taught, and assessed at different levels of education. Prerequisite: 12 hours of EGL  
Offered upon sufficient request
- EGL 4611, 4612, 4613 Independent Study/Research** **One to three hours**  
Independent study supervised by a member of the English faculty. A scholarly paper and/or a significant research project is required. Enrollment by consent of the department.  
Offered upon sufficient request

## EN (Engineering)

- EN 1112 Engineering Concepts and Design** **Two hours**  
A first course in engineering involving basic engineering concepts and the design process. Two hours lecture-discussion per week.  
Offered fall semester

**EN 1121 Production Techniques Laboratory** **One hour**

Basic training in the areas of welding, metal fabrication, and machine tools. Two two-hour laboratory periods per week.

Offered spring semester

**EN 1122 Concepts in Electrical Engineering** **Two hours**

An introduction to electrical circuits: Ohm's Law, Kirchoff's Laws, Thevenin and Norton equivalent circuits, resistors, capacitors, and inductors. Two hours lecture-discussion per week. Prerequisite: MTH 1134

Offered spring semester

**EN 1222 Concepts in Mechanical Engineering** **Two hours**

An introduction to the profession and its special arenas. Calculation adventures in structures, machine components, materials, motion, thermal and energy systems, and system design. Use is made of computerized solvers and CAD. Two hours lecture-discussion per week. Prerequisite: MTH 1134

Offered spring semester

**EN 2222 Instrumentation Lab** **Two hours**

An introduction to laboratory procedures, basic instrumentation techniques, and reporting of laboratory work. Includes the use of testing apparatus, oscilloscopes, various transducers, statistical analysis of data, and uncertainty analysis. One hour lecture-discussion and one three-hour laboratory per week. Prerequisites: EN 1122, 1222, and MTH 1144

Offered spring semester

**EN 2322 Engineering Economics** **Two hours**

A study of economics as applied to engineering decision making. Consideration is given to reliability, maintainability, and feasibility in comparisons of costing and payback schemes. The economic impact of environmental and safety considerations are explicitly included. The context is a free enterprise system, subject to government regulation and investment capitalization. Two hours lecture-discussion per week.

Offered spring semester

**EN 3213 Engineering Materials Science** **Three hours**

A microscopic study of engineering materials, with emphasis on acquiring basic knowledge of microstructure and processes that relate to properties and performance of engineering materials. Three hours lecture-discussion-laboratory per week. Prerequisite: CHM 1124

Offered fall semester

**EN 3222 Design Lab** **Two hours**

Student works on design projects in a team context. Four hours laboratory per week. Prerequisite: EN 2222

Offered spring semester

**EN 3313 Engineering Fields** **Three hours**

An integrated study of electric, magnetic, fluid, thermal, and other fields. Gauss's law and Laplace's and Poisson's equations with an introduction to Maxwell's equations. Numerical and graphical techniques. Two hours lecture-discussion and one three-hour laboratory per week. (Same as PHY 3313) Prerequisites: PHY 2124 and MTH 2123

Offered fall semester

## COURSE DESCRIPTIONS

### **EN 3501, 3502, 3503 Selected Topics** **One to three hours**

A study of a special area of engineering. May also be used as internship credit or independent study. Prerequisite: consent of department head

Offered upon sufficient request

### **EN 3513 International Problem Solving in Engineering and Business** **Three hours**

An opportunity for students to acquire the knowledge, ability, and predisposition to work effectively with people from other cultures who define problems differently than they do. Through course instruction and interactions, students examine the historical, social, cultural, religious, political, and value systems that impact how people approach problems differently, and are prepared to work in multi-cultural, diverse professions.

Offered fall semester

### **EN 4113 Engineering Design I** **Three hours**

A study of specifications, feasibility, modeling, optimization methods, elements of professionalism, and economic analysis. Initiation of the senior design project with written and oral reporting of preliminary work. Three hours lecture-discussion per week. Prerequisites: EN 3222 and MTH 2123

Offered fall semester

### **EN 4123 Engineering Design II** **Three hours**

A capstone course to integrate previous engineering learning experiences in problem formulation and solution. Includes the completion of the major design project initiated in Engineering Design I, with written and oral reporting of the work. Involves supervision of freshman design students. Three hours lecture-discussion per week. Prerequisite: EN 4113

Offered spring semester

### **EN 4303 System Design with Microprocessors** **Three hours**

A study of the application of microcomputers to systems with output related to input. Particular emphasis is given to interfacing techniques. Includes one design project. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisites: CS 1113 and EE 2213

Offered upon sufficient request

### **EN 4323 Control Systems** **Three hours**

A study of linear, continuous and digital, time-invariant control systems from both the classical transform and modern state-variable points of view. Three hours lecture-discussion per week. Prerequisite: EE 2223

Offered spring semester

### **EN 4403 Engineering Management** **Three hours**

A study of elements and process of engineering project management covering applicable subjects such as managerial processes, organizational behavior issues, project and task scheduling, cost estimating/evaluation/control, critical path evaluations, resource allocation, integrated tracking and control systems, risk analysis, problem identification, recovery processes and techniques, and decision theory. Three hours lecture-discussion per week. Prerequisite: EN 2322

Offered upon sufficient request

**EN 4503 Electro-Optics** **Three hours**

A study of wave and ray optics, diffraction, reflection, refraction, and polarization in free space and transmission lines, and waveguides. Laboratories include experiments with lasers, detectors, emitters, optical fibers, photovoltaic devices, optical communication, and optical instrumentation. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisite: EE 3313 Co-requisite: EN 3313

Offered upon sufficient request

**FAM (Family and Human Services)**

**FAM 2123 Psychology of Relationship Development** **Three hours**

A foundational course that integrates biblical and psychological literature in the area of interpersonal, marriage, and family relationships. Course work includes analysis and application of current theory and psychological research on gender differences, family of origin issues, sexuality, personality types, communication styles, forgiveness, dating, and emotional intelligence. An additional fee associated with this course. This course may not be audited. (Same as PSY 2123)

Offered spring semester

**FAM 2133 Introduction to Family Science** **Three hours**

A study of family structure and dynamics from the perspective of theology and family science theory. Some of the major theories for understanding families are evaluated along with God's model of family roles and relationships, and what families are like when they are empowering or disabling, healthy or dysfunctional, successful or unsuccessful. Genograms are a major tool. Prerequisite: sophomore standing

Offered each semester

**FAM 2413 Developmental Psychology** **Three hours**

A study of physical, cognitive, emotional, and social development of the human from conception through adulthood. (Same as PSY 2413) Prerequisite: PSY 1013

Offered each semester

**FAM 3133 Marriage and Family Living** **Three hours**

A study of contemporary marital and family issues in light of a theological understanding of family relationships and responsibilities. Family lifespan issues and parent education issues include singleness, courtship, child-rearing practices and effects through developmental stages, and factors known to affect family health.

Prerequisite: FAM 2133

Offered each semester

**FAM 3223 Principles of Effective Parenting** **Three hours**

The course focuses on principles of effective parenting including theoretical approaches to understanding parent/child relations, parenting styles, the etiology of child behaviors, and mechanisms of behavior change. Various family structures and interactions over the family lifespan are considered. The course will also explore biblical and theological principles of parenting. Prerequisite: FAM 2133 Corequisite: FAM 3133

Offered spring semester (beginning 2011)

## COURSE DESCRIPTIONS

### **FAM 3243 Family Sexuality** **Three hours**

A study of normal sexual development throughout the lifespan, considered from physical, social, spiritual, moral, and theological vantage points. By helping students understand typical expectations and experiences of human sexuality, they will be able to better recognize healthy and unhealthy sexuality in themselves and others.

Prerequisites: junior/senior level standing, a human development course, and BBL 3003 or consent of instructor

Offered each semester

### **FAM 4221 Introduction to Senior Seminar** **One hour**

This course introduces the student to the fundamentals of research for their Senior Seminar project. Course work includes development of a topic and research methodology.

Offered spring semester

### **FAM 4253 Family Communication** **Three hours**

A course designed to help students become more skillful in interpersonal communication as well as facilitating communication within the premarital and family setting. Includes communication for the purpose of building intimacy and conflict resolution. An additional fee associated with this course. Prerequisites: FAM 2133, 3133, and senior standing

Offered each semester

### **FAM 4433 Senior Seminar** **Three hours**

A capstone course in Family and Human Services in which students strive 1) to integrate their previous academic and internship experiences; 2) to complete a professional portfolio of their education, experiences, and work-samples; and 3) to demonstrate competence in their discipline through family life program evaluation, planning, and implementation. The senior project requires a major study and formal paper written for a professional program (secular, church, or parachurch) that provides family life education and/or services. It is to be taken during the student's final fall semester of study. Prerequisites: senior level standing, FAM 2133; and 3133 or consent of instructor

Offered fall semester

### **FAM 4443 Critical Concerns with Adolescents** **Three hours**

An examination of some of the critical issues facing parents, counselors, youth leaders, social workers, and educators by means of journal reviews, interviews, and computer searches. Students research topics such as teenage suicide, substance abuse, pregnancy and abortion, gangs, sexual/physical abuse, and divorce. (Same as CMN 4443)

Offered spring semester

### **FAM 4453 Family Law and Society** **Three hours**

This class develops the skills of analyzing statutes and court cases, writing legal arguments and interviewing clients enmeshed in legal issues that affect families. Legal areas include marriage, divorce, child custody, family crimes, adoption, abortion, inheritance, death and dying, courts, and the Department of Human Services.

Prerequisite: junior standing

Offered fall semester



**FAM 4481, 4482, 4483 Selected Topics One to three hours**

Topics are chosen from areas of Family and Human Services. The student may also do independent study and research under the supervision of the instructor.

Prerequisite: consent of instructor

Offered upon sufficient request

**FAM 4611, 4612, 4614 Internship in Family and Human Services One to four hours**

Practical experience working under a qualified professional in the area of Family and Human Services or family life education. Enrollment is limited to majors and minors in this field. May be repeated for credit as needed to fulfill the necessary requirements. Each semester hour represents 50 hours of service.

Offered each semester

## **GSC (General Science)**

**GSC 1023 Physical Science Three hours**

Selected and coherent topics in the sciences of physics, chemistry, and earth science. An evaluation of the scientific method and the contributions of the theories and facts of science to society are emphasized so that students have sufficient information to evaluate arguments using scientific justification. Three hours lecture-discussion-demonstration per week.

Offered each semester

**GSC 1033 Astronomy Three hours**

A general education course consisting of the study of the basic concepts in astronomy and space science including a study of Newtonian mechanics, Kepler's laws, solar phenomenon, the near earth space environment, stellar evolution, classification and spectra, types of galaxies, and cosmology.

Offered fall semester

**GSC 1143 Earth Science Three hours**

Introductory survey of topics in geology, astronomy, and meteorology. Earth materials and processes of geology are emphasized.

Offered fall semester (even-numbered years)

**GSC 3003 Global Stewardship Three hours**

A practical examination of Christians' mandates to serve and care for the earth and to love our neighbors as we love ourselves. Both of these directives assume that we have a clear understanding of how Earth's biological, geological, chemical, anthropological, sociological, and political systems work. Students in Global Stewardship explore these issues through a study of environmental science from a perspective of Christian responsibility. Meets Global Studies requirement in the Core Curriculum. Prerequisite: Core Life Science

Offered spring semester (even-numbered years)

**GSC 3103 Science for Elementary and Middle School Teachers Three hours**

Study of physical and biological environment designed to help prospective elementary and middle school teachers to develop a scientific perspective on their surroundings. Various methods of communicating scientific truth and encouraging scientific inquisitiveness are presented and practiced. Prerequisite: BIO 1003 and GSC 1023; GSC 1143 strongly recommended

Offered spring semester



## COURSE DESCRIPTIONS

### **GSC 4133 Faith and Science** **Three hours**

A capstone course designed to assist students in developing an integrated view of faith and science. Topics are selected from fundamentals of the Christian faith, history of science, nature of science, discovering God in the physical universe, creation of life, evolution of life, science in philosophy and theology, science and culture, and images of man. Prerequisite: senior standing or consent of instructor

Offered spring semester

## **HST (History)**

### **HST 1013 Western Civilization I** **Three hours**

A survey of the origins and development of Western civilization in its global context to the early Renaissance.

Offered each semester

### **HST 1023 Western Civilization II** **Three hours**

A survey of the development of Western civilization in its global context from the early Renaissance to the present.

Offered each semester

### **HST 1083H Honors: Western Civilization I** **Three hours**

A survey of the origins and development of Western civilization in its global context to the early Renaissance, focusing on major issues and turning points as highlighted in original documents. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered fall semester

### **HST 1093H Honors: Western Civilization II** **Three hours**

A survey of the development of Western civilization in its global context from the Renaissance, focusing on major issues and turning points as highlighted in original documents. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered spring semester

### **HST 2111 Selected Topics: Language Lab** **One hour**

A rudimentary introduction to a language of interest, designed to enrich historical study of a particular era. Possible offerings include Egyptian Hieroglyphics, Greek, Roman inscriptions, Medieval Latin, Anglo-Saxon, and Romance and Celtic languages.

Offered spring semester

### **HST 2112 Selected Topics: Great Books** **Two hours**

A two-hour course devoted to a single great work or author. Examples of the kinds of works focused on: Aristotle's *Nicomachean Ethics*; Booker T. Washington, *Up from Slavery*; *The Federalist Papers*; Tocqueville's *Democracy in America*.

Offered spring semester

### **HST 2113 United States History to 1865** **Three hours**

A survey of American political, social, and economic history from the colonial era through the Civil War.

Offered fall semester (odd-numbered years)

### **HST 2123 United States History since 1865** **Three hours**

A survey of American political, social, and economic history from the reconstruction era to the present.

Offered spring semester (even-numbered years)

**HST 2153 Twentieth Century World History Three hours**  
A study of major political, economic, intellectual, and military trends of the twentieth century.

Offered fall semester (odd-numbered years)

**HST 2213 Study of History Three hours**  
A course that introduces students to the skills needed for historical study, as well as to historiographical topics and challenges.

Offered fall semester (even-numbered years)

**HST 2243 Middle Ages Three hours**  
A study of medieval Europe with an emphasis on the role of the Celts, Germanic tribes, and the church in shaping medieval society, culture, and intellectual life.

Offered spring semester (even-numbered years)

**HST 2323 Poverty and Welfare in American History Three hours**  
A study of poverty and welfare in American history from the colonial period to the present. Particular attention is paid to the theology of poverty in the American context.

Offered spring semester (even-numbered years)

**HST 2413 Arkansas History Three hours**  
A study of the political, social, and economic development of Arkansas from the eras of exploration and early statehood to the present. Major themes include the Civil War and Reconstruction, segregation and disenfranchisement, the one-party experience, progressivism, the struggle for democracy, and civil rights. Meets state requirements for elementary and secondary teachers.

Offered upon sufficient request

**HST 2523 Classical World Three hours**  
A study of the ancient Western world from the development of Greece to the fall of the Roman Empire. The military, social, and political consequences of Greek and Roman rule are considered.

Offered fall semester (odd-numbered years)

**HST 2533 Early Modern Europe Three hours**  
A study of the origins and development of early modern Europe with variable emphases on the Renaissance, Reformation, Scientific Revolution, and Enlightenment.

Offered fall semester (odd-numbered years)

**HST 3253 British Empire Three hours**  
A study of the origins, development, rise, and decline of the British Empire, from the early modern period to the present. Attention is devoted to British activity in the Caribbean, Asia, Africa, the Middle East, North America, and Europe.

Offered spring semester (even-numbered years)

## COURSE DESCRIPTIONS

- HST 3263 American Slavery in Comparative Perspective** **Three hours**  
A study of the development of American slavery in comparative context. Topics include early forms of slavery and the slave systems of the Atlantic world and United States. American slavery is compared with slavery in the British, Dutch, Spanish, and French colonies in the Caribbean and Latin America.  
Offered fall semester (odd-numbered years)
- HST 3273 America at War, 1861-1919** **Three hours**  
A study of the causes, course, and consequences of the American Civil War, Spanish-American War, and First World War. Attention is also given to smaller conflicts, as well as to warfare associated with the settlement of the American West.  
Offered fall semester (even-numbered years)
- HST 3313 Second World War** **Three hours**  
A study of the causes, course, and consequences of the Second World War. Special attention is given to the Nazi regime and to the experience of frontline combatants.  
Offered spring semester (odd-numbered years)
- HST 3411, 3412, 3413 Selected Topics** **One to three hours**  
Selected topics in history are considered. Examples include Renaissance Europe, American Founding, American West, and Nazi Germany. Prerequisite: consent of the History Department  
Offered upon sufficient request
- HST 3423 Leaders in History** **Three hours**  
A study of leaders, well-known and lesser known, in their historical contexts. The efforts of leaders in business, politics, social and cultural movements, and warfare are examined. Consideration is given to success and failure, personality strengths and flaws, and leadership characteristics and styles.  
Offered upon sufficient request
- HST 3433 History of the Middle East, 600-1800** **Three hours**  
A study of the major political, religious, and social forces that shaped life in the Middle East from the time of Muhammad to the early modern period. Special attention is given to the development of the Islamic tradition and the interactions between Muslims, Jews, and Christians.  
Offered fall semester (even-numbered years)
- HST 3443 The Modern Middle East** **Three hours**  
An examination of the political and social environment of the Middle East from the beginning of the nineteenth century to the present. Topics that will be discussed include European colonization, the Ottoman Empire, Arab nationalism, the Arab-Israeli Conflict, the rise of the Islamist movement, and the U.S. involvement in the Gulf War.  
Offered spring semester (odd-numbered years)
- HST 3463 African Civilization to 1850** **Three hours**  
A study of the development of Africa to 1850. Attention is given to Africa in the global context. Areas of inquiry include Islam in Africa, sub-Saharan "stateless" societies, the slave trade, and colonization in South Africa.  
Offered fall semester (even-numbered years)

**HST 3473 African Civilization since 1850 Three hours**

A study of the development of Africa since 1850. Topics include colonial ideology and rule, independence movements and African nationalism, post-colonial culture and politics, inter- and intra-state conflict, and contemporary issues in Africa.

Offered spring semester (odd-numbered years)

**HST 4511, 4512, 4513 Independent Study One to Three hours**

Supervised study of topics of special interest to the student and professor, or the individualized study of required history courses.

Offered upon sufficient request

**HST 4613 Seminar in History Three hours**

The course brings psychological, philosophical, and theological reflections to bear on the study of history. All students will write a sophisticated research paper between 15-25 pages in length. Prerequisite: senior standing or consent of History Department

Offered spring semester (odd-numbered years)

## HONORS

**\_\_\_ 4193H Honors Capstone Project in \_\_\_\_\_ Three hours**

A substantial scholarly project/paper representing significant research, normally in the student's major field. The endeavor must be approved by the divisional (and in some cases departmental) chair, a faculty mentor, and the Honors Committee.

Guidelines may be obtained from the Honors Scholars Office.

Offered each semester

**\_\_\_ 4593H Honors Tutorial in \_\_\_\_\_ Three hours**

Modeled on the European system of education, an independent study in which the student writes papers in response to assigned writings, then meets with the faculty mentor to read and discuss each paper. Papers may be written weekly for eight weeks or bi-weekly for the entire semester. Must be approved by the division chair, the faculty mentor, and the Honors Committee. Guidelines may be obtained from the Honors Scholars Office. Prerequisite: junior standing

Offered each semester

**\_\_\_ 4693H Honors Class Contract in \_\_\_\_\_ Three hours**

A substantial scholarly project/paper, including significant research and/or other appropriate activities that warrant honors credit, in a non-honors upper-division class in addition to the work normally required for the course. Must be approved by the division chair, the faculty mentor, and the Honors Committee. Guidelines may be obtained from the Honors Scholars Office. Prerequisite: junior standing

Offered each semester

**\_\_\_ 4793H Honors Service Learning in \_\_\_\_\_ Three hours**

A service learning project planned, developed, overseen, and executed by the student in conjunction with the faculty mentor. Must be approved by the division chair, the faculty mentor, and the Honors Committee. Guidelines may be obtained from the Honors Scholars Office. Prerequisite: junior standing

Offered each semester

- \_\_\_ 4913H Honors Co-Teaching: Readings in \_\_\_\_\_  
 \_\_\_ 4923H Honors Co-Teaching: Classroom Practicum in \_\_\_\_\_  
**Each course, three hours**

A six-hour teaching practicum with a master teacher as mentor. During the first semester, the student is assigned readings in pedagogy and the content area, resulting in a lengthy scholarly paper that articulates a theory of teaching and presents sample lesson plans. During the second semester, the upper-division student co-teaches a limited number of class sessions (up to one third) in an introductory level class. Must be approved by the undergraduate dean, the division head, the faculty mentor, and the Honors Committee. Guidelines may be obtained from the Honors Scholars Office. Prerequisite: senior standing

Offered each semester

## ICS (Intercultural Studies)

- ICS 1511 Introduction to Walton Scholarship** **One hour**

Preparation for incoming freshmen in the Walton International Scholarship Program (WISP). A foundation for success at JBU is laid by helping students understand the WISP's goals and gain skills needed for a successful college career.

Offered fall semester

- ICS 2113 Intercultural Communications** **Three hours**

A study of the process of interpersonal communications in one's own culture and the principles of effective communication within another cultural context. Attention is given to values, ethnocentricity, nonverbal communication, and change.

Offered spring semester

- ICS 2991, 2993 Study Abroad Experience** **One or three hours**

A study of a particular non-U.S. region or culture that includes a minimum four-week immersion experience in that region or culture. Fulfills the Global Studies requirement in the Core Curriculum.

Offered upon sufficient request

- ICS 3133 Cultural Research Methods** **Three hours**

A study of the stages of field research, data-gathering techniques, participant observation, interviewing, census, mapping, document analysis, and trends in ethnographic research. Prerequisite: ICS 2113 or SST 2123

Offered spring semester (odd-numbered years)

- ICS 3163 Geo-Cultural Studies** **Three hours**

Researching the history, geography, social structures, religious, and economic environments of specific countries to be visited by student teams.

Offered upon sufficient request

- ICS 3171, 3172, 3173 Selected Topics** **One to three hours**

Investigation of subjects of specific interest and importance to the student preparing for specialized intercultural service.

Offered upon sufficient request

**ICS 3243 Principles and Philosophy of Community Development** **Three hours**

An introduction to the basic principles and strategies of community development. Students learn how to facilitate community development in impoverished areas in such a way that faith and appropriate technology are joined together to reduce human drudgery, to alleviate poverty, and to contribute to a deeper understanding and effective application of spiritual truths. Emphasis is placed upon the developer's role as a facilitator of social change, the skills needed for facilitating social change, and an understanding of how communities adopt new ideas. Prerequisites: ICS 2113 or SST 2123

Offered fall semester (even-numbered years)

**ICS 3263, 3283 Theory and Practice of Appropriate Technology I, II** **Each course, three hours**

Appropriate Technology (AT) is a study of applying technologies relevant to the context or environment in which they will be used. Emphasis is placed on applying technologies of housing and construction, energy, food production, land management, manufacturing, and health and sanitation to community development projects.

Prerequisite for 3283: ICS 3263

3263 offered spring semester (odd-numbered years)

3283 offered fall semester (odd-numbered years)

**ICS 4113 Intercultural Family Seminar** **Three hours**

A study of the elements for the successful transition of a family from their own culture into a different cultural setting. Skills for confronting culture stress and perceived expectations are considered. A model for family synergy is proposed.

Offered spring semester (even-numbered years)

**ICS 4123 Intercultural Internship** **Three hours**

A supervised intercultural experience in which the student works with an approved mentor selected with the vocational objectives of the student in mind. A minimum of 135 hours of practical service is required. Written assignments are required, including a personal philosophy of intercultural service. Limited to Intercultural Studies majors. Prerequisites: ICS 2113 or SST 2123 and approval by professor

Offered each semester

**ICS 4133 Intercultural Leadership Skills** **Three hours**

A practical examination of the process of developing and maintaining effective intercultural relationships. Leadership skills, intercultural team dynamics and conflict resolution, and the servant model of leadership are considered. Prerequisite: ICS 2113 or SST 2123

Offered fall semester (odd-numbered years)

**ICS 4183 Cultural Values Seminar** **Three hours**

An examination of contemporary Western values contrasted with values expressed in other cultures and evaluated in light of biblical principles. Enrollment limited to Intercultural Studies majors and minors in the final year or by consent of instructor. Prerequisites: ICS 2113 or SST 2123

Offered spring semester

## COURSE DESCRIPTIONS

### **ICS 4511 Capstone to Walton Scholarship** **One hour**

Preparation for graduating seniors in the Walton International Scholarship Program. Topics of discussion include re-entry into Latin American culture, professional considerations, and future roles as successful WISP alumni.

Offered spring semester

## **IDS (Interdisciplinary Studies)**

### **IDS 1101 Career Planning** **One hour**

Development of career decision-making skills through assessment and evaluation of self and the work world, using testing, computer guidance systems, and exercises.

Offered fall semester

## **INT (International Business)**

### **INT 2113 European Business Practices** **Three hours**

A study of the cross-cultural aspects of doing business internationally, with special focus on the European context. As part of the course requirements, students travel to Europe for four weeks to experience cultural behaviors and differences firsthand.

Offered summer

### **INT 2183 International Management** **Three hours**

Study of the management process from the perspective of an international organization. (Same as MGT 2183)

Offered fall semester

### **INT 3113 European Trade** **Three hours**

An examination of the basics of international trade, the relevance of the EU, and the integration of the European economy. Included in the curriculum is a four-week tour of European businesses and political institutions relevant to trade.

Offered summer

### **INT 3153 International Marketing** **Three hours**

Study of the marketing process from an international/global perspective with emphasis on developing, promoting, and pricing products in emerging markets. (Same as MKT 3153) Prerequisite: ECN 2003 or 2113

Offered spring semester

### **INT 3173 International Finance** **Three hours**

Study of methods and processes of financial management for multinational organizations. Prerequisites: ATG 2183 and ECN 2003 or 2123

Offered spring semester

### **INT 4113 Marketing Research** **Three hours**

Applied study of marketing research using projects supplied by multinational firms. Includes role and methods of marketing research as a means to enhance the marketing strategies and decisions of the modern business organization. Theory and application of such topics as problem identification, research design, survey development, data analysis, and report presentation are covered. Client interaction is emphasized. (Same as MKT 4113) Prerequisite: BUS 2193

Offered fall semester



**INT 4131, 4132, 4133 Selected Topics** **One to three hours**

A course offering students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor

Offered upon sufficient request

**KIN (Kinesiology)**

**KIN 1102, 1103 First Aid and CPR** **Two or three hours**

Instruction in basic first aid, safety, and cardiopulmonary resuscitation (CPR).

Students enrolled in 1103 are required to observe emergency treatment and participate in ambulance calls through a certified/licensed EMT response facility, and to write a paper recounting the experience.

Offered each semester

**KIN 1283 Athletic Training Techniques** **Three hours**

Instruction in the recognition, prevention, and care of athletic injuries as well as advanced emergency medical treatment, and proper selection, care, and use of protective sports equipment.

Offered spring semester

**KIN 1381, 1481 Field Experience** **Each course, one hour**

A minimum of 40 hours of field experience per credit hour. Students are introduced to the professions in areas related to Kinesiology through observation of professionals in the field.

Offered each semester

**KIN 2181 Medical Terminology** **One hour**

Directed self-study in the use of the basic prefixes, suffixes, and roots of medical terminology. The course assists the student in utilizing medical terms appropriately in both written and verbal forms.

Offered spring semester

**KIN 2242 Drugs in Society** **Two hours**

An introductory course focusing on the use and abuse of drugs on our society.

Emphasis on strategies to assist future educators, practitioners, and youth leaders in recognition, intervention, and prevention of abuse.

Offered fall semester (even-numbered years)

**KIN 2283 Injury Evaluation and Rehabilitation** **Three hours**

A systematic study and laboratory application of athletic training injury evaluation principles, techniques, and rehabilitation for the spine and upper/lower extremities.

Offered fall semester (odd-numbered years)

**KIN 3303 Nutrition for Fitness and Sport** **Three hours**

A study of the nutritional considerations and implications for individuals active in physical fitness and sporting activities.

Offered spring semester (even-numbered years)

**KIN 3353 Theory and Techniques of Coaching** **Three hours**

Exploration of philosophical, sociological, and psychological considerations of human performance in competitive athletics. Various theories and techniques of coaching are explored and practiced.

Offered fall semester (odd-numbered years)



## COURSE DESCRIPTIONS

**KIN 3392 Personal Training Course** **Two hours**  
A practical study to prepare and qualify students to work as personal trainers. Class activities are designed to bridge the gap between kinesiology-related course work and the application of skills in personal training. Participants become eligible to test for a personal training certification provided by the National Council on Strength and Fitness Board for Certification. Prerequisite: junior standing or consent of instructor  
Offered fall semester (odd-numbered years)

**KIN 3483 Therapeutic Exercises and Modalities** **Three hours**  
A study in theory and application of therapeutic modalities and rehabilitation exercise/equipment prescribed for the treatment and management of athletic injuries.  
Offered fall semester (even-numbered years)

**KIN 4423 Biomechanics** **Three hours**  
A study of body movement and the analysis of those movements in terms of force, time, and dimension. The course includes selected anatomical and functional kinesiological content. Prerequisite: BIO 3514  
Offered spring semester (even-numbered years)

**KIN 4433 Exercise Physiology** **Three hours**  
A study of physiological responses and adaptations of the human body to physical activity. Prerequisite: BIO 3524 Offered spring semester (odd-numbered years)

**KIN 4491-4496 Internship** **One to six hours**  
Practical experience working under a qualified professional in the area of sports medicine/athletic training, community health education, or fitness, in an approved setting. Prerequisite: consent of advisor  
Offered each semester

## LDR (Leadership)

**LDR 1520-26 Leadership Colloquium** **Each course, one hour**  
This course offers academic credit for the LSI curriculum of leadership events and activities. One credit may be awarded for the successful completion of each year of the program. Furthermore, special intensive leadership learning events or opportunities for specific application may be available for credit in addition to the regular curriculum.  
Offered each semester

**LDR 1553 Introduction to Leadership** **Three hours**  
As an initial study of personal leadership, this course provides a foundation for understanding leading and following. Emphasis is on leadership as a social process involving the interaction of leaders and followers in a variety of practical contexts. Required for all students in the Leader Scholar Institute. LSI students should take this class in the spring of their first year, unless special permission is granted by the instructor.  
Offered each semester

**LDR 2121 Student Leadership** **One hour**  
The purpose of this course is to increase the effectiveness of student leaders. It is designed for those students planning to be in leadership positions on the JBU campus. Topics surrounding student leadership issues are the focus.  
Offered spring semester

**LDR 2551 Service Learning** **One hour**  
A practical, self-directed independent study focused on giving students a better understanding of global issues and how to change these issues from information into action. Students research and present their chosen global issue in a variety of different methods throughout the semester.  
Offered each semester

**LDR 2553 Leadership Theory and Practice** **Three hours**

An introductory course exploring the various leadership theories throughout history. Trait Approach, Skills Approach, Style Approach, Situational Approach, Contingency Theory, Path-Goal Theory, Leader-Member Exchange Theory, Transformational Leadership, Team Leadership, and the Psychodynamic Approach are examined in depth. Students learn not only the ideas behind these theories; they also learn the practical application of these theories.

Offered spring semester

**LDR 2991, 2992, 2993 Students in Free Enterprise (S.I.F.E.)**  
**One to three hours**

Student-directed program established to promote economic education about the free enterprise system to other students and the community. Emphasizes experiential acquisition of leadership skills through self-directed projects and participation in national and international competitions. (Same as MGT 2991, 2992, 2993)

Offered each semester

**LDR 3553 Leadership Competencies** **Three hours**

Focused analysis of leadership skill sets necessary to ensure good individual and organization performance: modeling the way, inspiring a shared vision, challenging the process, enabling others, and encouraging the heart. Attitudes and mindsets of effective leaders are also examined. Aspiring leaders lay groundwork for success through the exploration of real-world examples, practical applications, and numerous leadership exercises.

Offered fall semester

**LDR 3563 Organizational Leadership** **Three hours**

A capstone study of emotional intelligence and organizational behavior and how those concepts impact today's organizational challenges. Students analyze specific leadership situations, gaining insight into such topics as conflict resolution, the four quadrants of EQ, organizational behavior theory and practice. Using experiential learning methods, students analyze team and organizational processes in work situations, increasing understanding of the concepts of consensus building, small group life-cycles, leading teams, and group dysfunction.

Offered spring semester

**LDR 3651, 3652, 3653 Leader Scholars Institute Capstone**  
**One to three hours**

Designed to offer a pragmatic, culminating experience in applied leadership, this course provides a venue in which students design, implement, and evaluate an individual hands-on leadership project. Projects involve at least 50 hours of independent work. The goal is to find projects which "give back" to communities that have supported the student earlier in life. This course is required of all LSI students. It is preferred that LSI students take this course in their junior year.

Offered each semester

**LDR 4131, 4132, 4133 Selected Topics** **One to three hours**

A course offering students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor

Offered upon sufficient request

## LS (Language Studies)

### **LS 1113, 1123 Elementary Spanish I, II Each course, three hours**

Basic skills of listening, reading, speaking, and writing the language, with special emphasis on verbal and aural comprehension. Much use of songs and clips from Spanish-language television and feature films. An overview of the diverse cultures of the Spanish-speaking world is given.

1113 offered fall semester  
1123 offered spring semester

### **LS 1173, 1183, 1193 English as a Second Language I, II, III Each course, three hours**

The non-native English speaker who is judged not ready for EGL 1013 is required to take LS 1173, 1183, and/or 1193. Advancement through the sequence of ESL courses is determined by the student's score on the ESL component of the COMPASS test. If satisfactory proficiency has not been achieved, a student is required to repeat an ESL course one or more times without additional credit. In addition to regular class meetings, two 50-minute laboratory sessions are required each week.

1173 offered upon sufficient request  
1183 offered fall semester  
1193 offered each semester

### **LS 1213, 1223 Elementary French I, II Each course, three hours**

A study of the basic skills of listening, reading, speaking, and writing the language. Students are taught practical skills such as ordering meals, checking into a hotel or youth hostel, and using public transportation. Frequent dictées are done in class and as homework. Pronunciation is drilled and students make recordings which are graded. There is some work on gestures and physical greetings. Textbook-specific videos are used. Some attention is given to Francophone countries besides France.

1213 offered fall semester  
1223 offered spring semester

### **LS 1313, 1323 Elementary German I, II Each course, three hours**

Basic skills of listening, reading, speaking, and writing the language, with special emphasis on verbal and aural comprehension. During the fall semester there is a short unit on the Reformation and German Advent and Christmas customs. The second course includes supplementary readings about German immigration to the U.S. Students who have German ancestry are encouraged to share family memorabilia and traditions with the class. German folksongs are taught each semester.

1313 offered fall semester (even-numbered years)  
1323 offered spring semester (odd-numbered years)

**LS 1413, 1423 Elementary Latin I, II Each course, three hours**

A foundational study of Latin vocabulary and grammar for the purpose of developing reading skills. Texts range from Vulgate New Testament passages, traditional Latin hymns, and historical documents such as the Nicene Creed in the first course, to Caesar's *Gallic Wars*, St. Paul's epistles, and writings of recent authors such as C.S. Lewis in the second. The courses also feature English-to-Latin translation exercises. Prerequisite for 1423: LS 1413

1413 offered fall semester (even-numbered years)

1423 offered spring semester (odd-numbered years)

**LS 1513, 1523 Selected Topics Each course, three hours**

Introductory study of a language other than those regularly offered.

Offered upon sufficient request

**LS 1593 Contemporary Latin America Three hours**

An examination of the commonalities as well as the unique national experiences of each country in Latin America, addressing the social, political, historical, and economic factors. No knowledge of the Spanish language is required.

Offered upon sufficient request

**LS 2113, 2123 Intermediate Spanish I, II Each course, three hours**

Advancing study of the language skills of listening, reading, speaking, and writing.

The first course entails a comprehensive grammar analysis; the second involves much cultural and literary reading and the writing of short compositions.

2113 offered fall semester

2123 offered spring semester

**LS 2213, 2223 Intermediate French I, II Each course, three hours**

Advancing study of the language skills of listening, reading, speaking, and writing.

There is much use of French-language television clips, feature films, songs, and assorted pedagogical videos. A unit on France during WWII, with particular attention to the Holocaust, is included in 2223.

2213 offered fall semester (even-numbered years)

2223 offered spring semester (odd-numbered years)

**LS 2513, 2523 Selected Topics: Intermediate Language I, II**

**Each course, three hours**

Intermediate study of a language other than those regularly offered.

Offered upon sufficient request

**LS 3113 Readings in Spanish I Three hours**

Readings about contemporary Latin American culture, with emphasis on societal issues. Students use a variety of resources, including assigned texts, television, print media, the Internet, and others. Class presentations are required. This class is taught in Spanish. Prerequisite: LS 2123

Offered fall semester

## COURSE DESCRIPTIONS

### **LS 3123 Readings in Spanish II** **Three hours**

A study of selected short stories, poetry, and essays by Latin American writers, such as Isabel Allende, Carlos Fuentes, and others. A final paper and a presentation are required. This class is taught in Spanish. Prerequisite: LS 3113 recommended

Offered spring semester

### **LS 3173 Introduction to Linguistics** **Three hours**

Phonetics, syntax, semantics, language change (special attention to the history of English), language variety (taxonomy and dialects), the Bible and language, Christian approaches to the study of language, and translation theory. Besides a number of core readings and assignments, there are other items related to each student's major or minor. For example, Spanish majors and minors do work on Spanish phonetics and pronunciation, and TESOL minors have projects involving pitfalls for learners of English as a second language.

Offered fall semester (odd-numbered years)

### **LS 3213 Readings in French I** **Three hours**

Readings about the culture of Francophone countries, with emphasis on societal issues in French-speaking Europe. A brief consideration of French history is included.

Students use a variety of resources, including assigned texts, television, print media, the Internet, and others. Class presentations are required. This class is taught in French. Prerequisite: LS 2223

Offered upon sufficient request

### **LS 3223 Readings in French II** **Three hours**

A study of selected short stories, poetry, and essays by Francophone writers. Most of the works were produced by 19th- and 20th-century authors and poets such as Charles Baudelaire, Alphonse Daudet, and others. A final paper and a presentation are required. This class is taught in French. Prerequisite: LS 3213 recommended

Offered upon sufficient request

### **LS 3513, 3523 Selected Topics: Advanced Language I, II** **Each course, three hours**

Advanced study of a language other than those regularly offered.

Offered upon sufficient request

### **LS 4143 Second Language Acquisition for Spanish Teachers** **Three hours**

Taught in Spanish, a foreign language pedagogy course designed for future middle and high school Spanish teachers. Some attention is given to problematic Spanish language issues such as orthography, the placing of accents, false cognates with English, pronunciation, and irregular verbs.

Offered upon sufficient request

**LS 4163 Professional Spanish** **Three hours**  
A practical study conducted in Spanish providing a solid foundation in the vocabulary and discourse patterns related to professional life, with emphasis on business practices. Course components include a review of problematic grammatical structures, some attention to dialectical variations between countries, and practice in written translation and mock commercial correspondence. An overview of the geography of the Spanish-speaking world is also presented. Prerequisites: LS 3113 and 3123  
Offered upon sufficient request

**LS 4193 Language Internship** **Three hours**  
A minimum of 135 hours of contact time in a professional or ministry setting in the greater Siloam Springs area. Students keep a journal of their experiences, documenting specific vocabulary and grammatical forms they frequently used and a summary of their observations. Prerequisites: LS 3113, 3123, and Semester in Spain (Seville)  
Offered upon sufficient request

## **LSS (Language Studies ~ Semester in Spain)**

**Offered in Spain through Trinity Christian College**

**LSS 3044 Spanish Short Story** **Four hours**  
In-depth study of the Spanish language through a selection of writings by three contemporary Spanish storytellers: Miguel de Unamuno; Leopoldo Alas, "Clarín"; and Ignacio Aldecoa.  
Offered each semester

**LSS 3064 History of Spanish Art** **Four hours**  
Covers significant elements of Spanish art: Islamic, Romanesque, Gothic, Baroque, Modern and 20th Century. Includes paintings by Murillo, Velázquez, Picasso, and Dalí. Videos, slides, and field trips supplement classroom instruction. An additional \$100 fee is associated with this course to cover field trip expenses.  
Offered each semester

**LSS 3114 Spanish History and Civilization** **Four hours**  
Synthesis of the political, socio-economic, and cultural history of Spain from prehistoric origins through Imperial Spain, including the 19th century.  
Offered each semester

**LSS 3514 Advanced Spanish Grammar and Composition** **Four hours**  
Grammatical structures and specific vocabulary used in a series of composition and conversation themes.  
Offered each semester

**LSS 3554 Spanish Literature I** **Four hours**  
Introductory study of the history of Spanish literature. Reviews in theory and practice of the most representative passages of the key works of the Middle Ages, Renaissance, and Golden Age (the 11th through 17th centuries).  
Offered fall semester

## COURSE DESCRIPTIONS

**LSS 3564 Spanish Literature II** **Four hours**

Introductory study of the history of Spanish literature. Reviews in theory and practice of significant passages of the key works of the 18th, 19th, and 20th centuries.

Offered spring semester

**LSS 4611, 4612, 4613, 4614 Selected Topics** **One to four hours**

In-depth study of a topic of particular interest. Prerequisites: advanced standing, approval of the Department of Language Studies, and consent of on-site instructor

Offered upon sufficient request

### **ME (Mechanical Engineering)**

**ME 3113 Thermal Sciences** **Three hours**

An introduction to the thermal sciences of mechanical engineering providing an overview of thermodynamics, fluid dynamics, and heat transfer. Three hours lecture-discussion per week. (Same as PHY 3113) Prerequisites: MTH 1144 and PHY 2124

Offered fall semester

**ME 3123 Dynamics** **Three hours**

A vector analysis of the kinematics and kinetics of particles and rigid bodies. Work, energy, impulse, and momentum. Modeling with differential equations. Solutions by analog and numerical techniques. Includes the design of an experiment and a machine. Three hours lecture-discussion per week. Prerequisites: MTH 2114 and ME 3313

Offered spring semester

**ME 3223 Thermodynamics** **Three hours**

A continuation from ME 3113 of the study of the laws of classical thermodynamics with a brief introduction to compressible flow. Energy conservation in closed and flowing systems. Application to power and refrigeration cycles. Three hours lecture-discussion per week. (Same as PHY 3223) Prerequisites: ME 3113 and MTH 1144

Offered spring semester

**ME 3313 Statics and Strength of Materials** **Three hours**

A design sequence from applied loads to selection of optimum material, shape, and size for the elements in structures or machines. Forces are resolved in static equilibrium, then elastic or plastic stress analysis is used to assure adequate strength and deflection. Three hours lecture-discussion per week. Prerequisites: EN 1222 and MTH 2123

Offered fall semester

**ME 3501, 3502, 3503 Selected Topics** **One to three hours**

A study of a special area of mechanical engineering such as fluid induced vibrations, fluidics, rotating machinery, thermal energy converters, viscoelastic materials, or quality control. Prerequisite: consent of department head

Offered upon sufficient request

**ME 4103 Advanced Strength of Material** **Three hours**

Multidimensional considerations of stress and strain through constitutive models. Study of curved beams, pressure vessels, and machine components subjected to cyclic and thermal loading. Consideration of failure modes including plastic deformation analysis, rupture, and fatigue. Three hours lecture-discussion per week. Prerequisite: ME 3313

Offered upon sufficient request



**ME 4113 Machine Design** **Three hours**

Practical application of kinematics, materials mechanics, and mechanical processes to the design of machines and machine elements. Static and dynamic load analysis, stress analysis, material selection, and failure analysis. Three hours discussion-design per week. Prerequisite: ME 3123

Offered fall semester

**ME 4203 Mechanical Vibrations** **Three hours**

A study of the oscillatory motions of bodies and the forces associated with them. Includes the study of undamped and damped, free and forced vibrations, vibration of continuous systems, and random vibrations. Three hours lecture-discussion per week. Prerequisite: MTH 2114

Offered upon sufficient request

**ME 4213 Heat Transfer** **Three hours**

A study of energy movement due to temperature differences via the mechanisms of conduction, convection, and radiation. Includes a class design project. Three hours lecture-discussion per week. Prerequisites: MTH 2114 and ME 3113

Offered fall semester

**ME 4303 Finite Element Analysis** **Three hours**

Finite element methods covering fundamental concepts and computer implementation. Topics include solutions of boundary value problems in fluid and solid mechanics with thermal effects and applications to engineering design. Three hours lecture-discussion per week. Prerequisite: MTH 2114

Offered upon sufficient request

**ME 4323 Fluid Mechanics** **Three hours**

A study of the conservation of mass, momentum, and energy in relation to laminar and turbulent fluid flow. Viscous effects and application to steady and unsteady flow, incompressible and compressible fluids. Includes an individual design project. Two hours lecture-discussion and one two-hour laboratory per week. Prerequisites or corequisites: MTH 2114 and PHY 2124

Offered spring semester

**ME 4403 Compressible Flow** **Three hours**

One-dimensional compressible flow of perfect gases. Includes Mach waves, normal and oblique shocks, Prandtl-Meyer expansion waves, isentropic flow in variable area ducts, and flows in constant area ducts with friction or heat transfer. Three hours lecture-discussion per week. Prerequisite: ME 3113

Offered upon sufficient request

**ME 4503 Viscous Flow** **Three hours**

Study is pursued for special instances of Navier Stokes solutions, vorticity accounting, creeping, laminar, unstable, and turbulent flows. A case study in design is used to compare true viscous behavior with simplified "design" equations. Three hours lecture-discussion per week. Prerequisite: EN 3313

Offered upon sufficient request



## COURSE DESCRIPTIONS

### **ME 4603 Advanced Thermodynamics** **Three hours**

An extension to the thermodynamics taught in ME 3113 and ME 3223 to the realms of analytic, non-equilibrium, and statistical thermodynamics. Three hours lecture-discussion per week. Prerequisite: ME 3223

Offered upon sufficient request

### **ME 4703 Aerospace Propulsion** **Three hours**

A study of aerospace propulsion devices, including jet engines and rockets. Application of compressible flow, thermodynamics, and fluid mechanics to propulsion systems. Includes analysis of engine components. Three hours lecture-discussion per week. Corequisite: ME 3223

Offered upon sufficient request

## **MGT (Management)**

### **MGT 2173 Principles of Management** **Three hours**

An examination of basic principles of leadership and management from historical and contemporary perspectives. Topics include a discussion of the theories, concepts, interrelationships, moral dimensions, character, functions and skills required to lead and manage today's organizations.

Offered spring semester

### **MGT 2183 International Management** **Three hours**

Study of the management process from the perspective of an international organization. (Same as INT 2183)

Offered fall semester

### **MGT 2991, 2992, 2993 Students in Free Enterprise (S.I.F.E.)** **One to three hours**

Student-directed program established to promote economic education about the free enterprise system to other students and the community. Emphasizes experiential acquisition of leadership skills through self-directed projects and participation in national and international competitions. (Same as LDR 2991, 2992, 2993)

Offered each semester

### **MGT 3323 Management in Health and Sport** **Three hours**

Principles of organization and implementation of policies and procedures relating to the management of sports medicine/athletic training programs, health and physical education programs, community fitness and wellness programs, and camp/recreation programs. Principles, policies, and procedures are applied to personnel and facility management. Prerequisite: junior standing

Offered spring semester (odd-numbered years)

### **MGT 3343 Sport Facility Management** **Three hours**

A study of indoor and outdoor facilities utilized in sport and recreation. Planning, design, equipping, scheduling, programming, care and maintenance, and financial considerations are discussed.

Offered spring semester (even-numbered years)

**MGT 3513 Human Resource Management** **Three hours**

Introduction to human resource management principles, processes, and systems, including analysis of such elements as organizational assessment and human resource planning, recruitment and selection, compensation and benefits administration, training and development, employee relations, human resource management information systems, and employment laws.

Offered spring semester (odd-numbered years)

**MKT (Marketing)**

**MKT 3133 Retailing** **Three hours**

Exposure to the many facets of retailing with a focus on contemporary concepts. Topics include marketing structures, environmental analysis, financial strategies, merchandising, pricing, promotion, distribution, personnel issues, electronic retailing business models, and effective e-commerce retailing strategies.

Offered fall semester (odd-numbered years)

**MKT 3143 Principles of Marketing** **Three hours**

Study of the marketing process of identifying a need and selecting target markets; developing a product to satisfy the need; and distributing, promoting, and pricing the product. Prerequisite: ECN 2003 or 2113

Offered spring semester

**MKT 3153 International Marketing** **Three hours**

Study of the marketing process from a global perspective with emphasis on developing, promoting, and pricing products in emerging markets. (Same as INT 3153) Prerequisite: ECN 2003 or 2113

Offered spring semester

**MKT 3163 Consumer Behavior** **Three hours**

A study of the buying patterns, decision-making, motivation, and behavior of the consumer. Students analyze the psychological, social, and economic influences on consumption.

Offered fall semester (even-numbered years)

**MKT 4113 Marketing Research** **Three hours**

Applied study of marketing research using projects supplied by firms. Includes role and methods of marketing research as a means to enhance the marketing strategies and decisions of the modern business organization. Theory and application of such topics as problem identification, research design, survey development, data analysis, and report presentations are covered. Client interaction is emphasized. (Same as INT 4113) Prerequisite: BUS 2193

Offered fall semester

**MKT 4131, 4132, 4133 Selected Topics** **One to three hours**

A course offering students opportunities to study subjects of special interest. May be offered on a group basis in a classroom setting or as independent study under faculty supervision. Prerequisites: junior standing and consent of instructor

Offered upon sufficient request

## COURSE DESCRIPTIONS

### **MKT 4173 Marketing Strategies** **Three hours**

A capstone marketing course designed to integrate the student's knowledge of marketing through case analysis and practical application of marketing tools. Students design a marketing strategy for a community organization or business enterprise.

Prerequisite: MKT 4113

Offered spring semester (odd-numbered years)

## **MSC (Military Science ~ Army ROTC)**

### **MSC 1111, 1121 Military Skills and Leadership (MS I)**

**Each course, one hour**

Incorporates the Army ROTC courses involving both classroom and outdoor instruction. Teaches basic rappelling and mountaineering, care, maintenance, and firing of weapons; and the fundamentals of land navigation and survival operations in a field environment. The MS I cadet also receives instruction in leadership, organization, and role of the Army and reserve forces, branches of the Army, and the Army physical fitness program. These classes consist of one hour lecture-discussion and one hour laboratory per week. Open to freshman and sophomore level students only.

1111 offered fall semester

1121 offered spring semester

### **MSC 2112, 2122 Leadership Development I, II (MS II)**

**Each course, two hours**

A continuation of basic ROTC courses. During MS II, cadets are taught basic military subjects such as land navigation, first aid, marksmanship, role of NCO's, military correspondence, and drill and ceremonies. Cadets also spend time on leadership, Soviet military power, principles of war, and national defense policy. Two hours lecture-discussion and one hour leadership laboratory per week. Prerequisite: completion of MS I or equivalent, as determined by the Professor of Military Science. Core 11\_1 will be waived upon completion of both of these courses.

2112 offered fall semester

2122 offered spring semester

### **MSC 3114, 3124 Applied Leadership I, II (MS III)**

**Each course, four hours**

Development of managerial and leadership abilities, maximizing performance-oriented "hands-on" training. Student-led drill, physical training, and methods of instruction. Training intended to orient the students toward the ROTC Advanced Camp experienced normally in the summer prior to the senior year or fourth year of ROTC. Three hours lecture-discussion and three hours leadership laboratory (drill) per week. Prerequisite: completion of MS I and II, veteran status, Simultaneous Membership Program (SMP) participant or equivalent, as determined by the Professor of Military Science.

3114 offered fall semester

3124 offered spring semester

**MSC 4114, 4124 Advanced Leadership I, II (MS IV)**

**Each course, four hours**

The study of various military organizations and their role in military operations. Discussion of command and staff management in military organizations, executive responsibility of Army commissioned officers, service customs, courtesies, and traditions. The study of personnel management, the military justice system, training and maintenance management. Three hours lecture-discussion and three hours leadership and planning laboratory per week. Prerequisite: successful completion of MS III course work

4114 offered fall semester

4124 offered spring semester

**MTH (Mathematics)**

**MTH 0153 Intermediate Algebra**

**Three hours**

A course designed for students who need to improve their mathematical understanding and skills prior to taking Core Curriculum or major field math courses. This course covers the fundamentals of algebra, including simplification of algebraic expressions, solving equations, and graphing techniques. Intermediate Algebra does not satisfy any college math requirements; credit does not apply toward minimum hours required for graduation.

Offered fall semester

**MTH 1003 Quantitative Literacy**

**Three hours**

A course to give students tools to be critical readers of current issues involving quantitative data and to understand the concepts of statistics, the science of gaining information from numeric data. Applications of the use of data from a wide variety of professions, public policy, and everyday life are made. The study focuses on methods of producing data, organizing data, and drawing conclusions from data. Topics may include sampling; experiments and experimental design; measurement, validity, and accuracy; describing distributions; understanding relationships and correlation; consumer price index; confidence intervals; and statistical significance. Prerequisite: ACT Math score of at least 19 or equivalent, or MTH 0153

Offered each semester

**MTH 1113 College Algebra**

**Three hours**

Topics include solving equations and systems of equations, functions and graphing, complex numbers, inequalities, logarithms, exponentials, sequences, series, mathematical induction, and the binomial theorem. Prerequisite: ACT Math score of at least 19 or equivalent, or MTH 0153

Offered each semester

**MTH 1122 Trigonometry**

**Two hours**

Foundations and applications, including the trigonometric functions and their graphs, proving identities, analytic trigonometry, solution of triangles, polar coordinates, two-dimensional vectors, dot products, and DeMoivre's Theorem for powers and roots of complex numbers. Prerequisite or corequisite: MTH 1113

Offered spring semester

## COURSE DESCRIPTIONS

### **MTH 1123 Survey of Calculus** **Three hours**

An introduction to the concepts of differentiation and integration. An emphasis is placed on applied problems in physical, life, and social sciences. A student may not earn credit in both MTH 1123 and 1134. Prerequisite: ACT Math score of at least 24 or equivalent, or MTH 1113 and 1122

Offered spring semester

### **MTH 1134 Calculus I** **Four hours**

A study of the foundational principles of calculus with an emphasis on derivatives of functions of one variable and an introduction to integrals. A strong emphasis is placed on application to problems in science and engineering. Prerequisites: four years of high school mathematics and an ACT Math score of 24 or equivalent, or MTH 1113 and 1122

Offered fall semester

### **MTH 1144 Calculus II** **Four hours**

A continuation of the study of fundamental calculus concepts, with special emphasis on integration and the use of infinite series. Applications to problems in physics, probability theory, and engineering are emphasized. Prerequisite: MTH 1134

Offered spring semester

### **MTH 2103 Statistics with Computer Applications** **Three hours**

A study of statistical methods including frequency distributions, descriptive statistics, probability distributions, hypothesis testing—one sample and two sample  $z$ - and  $t$ -tests, analysis of variance—one-way between-groups, one-way repeated measures, two-way between-groups, correlation, and regression. Use of personal computer application programs for collecting, storing, analyzing, and presenting data in textual and graphical forms are emphasized, as well as the use of a high-end word processor, spreadsheet, database, graphics, statistical, and desktop publishing program for producing high quality reports and presentations. Also includes use of on-line databases and networks for data gathering. Prerequisites: computer literacy, and MTH 1113 or equivalent

Offered spring semester

### **MTH 2114 Linear Algebra and Differential Equations** **Four hours**

A continuation of the study of differential equations as begun in Calculus II with special emphasis on applications to problems in physics and engineering. The course also includes an introduction to linear algebra as this subject forms the basis for the study of higher dimensional systems of differential equations. In preparation for MTH 2123, the course ends with an introduction to vectors in two- and three-dimensional space. Prerequisite: MTH 1144

Offered fall semester

### **MTH 2123 Vector Calculus** **Three hours**

An introduction to the study and application of multivariable and vector calculus. Prerequisite: MTH 2114

Offered spring semester

**MTH 2143, 2183 Mathematical Structures I, II** **Each course, three hours**

A presentation of mathematics in a format that prepares teachers of elementary school mathematics. Topics include problem-solving, sets and logic, functions, the mathematical meaning and background of arithmetic through real numbers, number theory, probability and statistics, introductory geometry, geometric constructions, congruence, similarity, measurement, and coordinate geometry. Prerequisite for 2143: ACT Math score of at least 19 or equivalent, or Passing score (State Level) on Praxis I Math, or MTH 0153 with grade of 'C' or better. Prerequisite for 2183: MTH 2143

2143 offered fall semester  
2183 offered spring semester

**MTH 3103 Foundations of Mathematics** **Three hours**

Introductory predicate logic, set theory, and methods of mathematical proof. The general techniques learned are applied to topics from discrete mathematics, cardinality, metric spaces, algebraic structure, and field properties of real numbers. Prerequisite: MTH 1144

Offered fall semester

**MTH 3113, 4113 Selected Topics** **Each course, three hours**

Topics are chosen from various branches of mathematics such as set theory, number theory, complex variables, history of mathematics, combinatorics, and topology. May be repeated for credit when a different topic is studied. Prerequisite: consent of instructor

Offered upon sufficient request

**MTH 3143 Topics in Mathematics Education** **Three hours**

An introduction to the philosophy and practice of teaching mathematics. Discussion and analysis of current trends and an introduction to the literature. Prerequisites: MTH 1134 or 1123 and 2183

Offered fall semester (even-numbered years)

**MTH 3153 Foundations of Geometry** **Three hours**

An introduction to the theory of Euclidian, neutral, Lobachevskian, Riemannian, incidence, and affine geometrics, together with linear, planar and spatial order properties. Designed primarily for prospective secondary teachers of mathematics. Prerequisites: MTH 1134 or 1123 and 2183

Offered fall semester (odd-numbered years)

**MTH 3173 Mathematical Modeling and Simulation** **Three hours**

A study of the building of mathematical models and computer simulations to describe selected topics from physical, biological, and social sciences. Prerequisites: MTH 2123 and CS 1113

Offered upon sufficient request

**MTH 3183 Probability and Statistics** **Three hours**

An introduction to the theory of probability and statistical inference including discrete and statistical inference, discrete and continuous random variables, sampling distributions, the Central Limit Theories, estimation, and hypothesis testing. Prerequisite: MTH 1144

Offered spring semester

## COURSE DESCRIPTIONS

**MTH 4101 Readings** **One hour**

A directed experience in reading in the mathematical literature. Prerequisite: MTH 1144

Offered each semester

**MTH 4123 Abstract Algebra** **Three hours**

An introduction to modern algebra and algebraic structures such as groups, rings, integral domains, and fields. Prerequisites: MTH 2114 and 3103

Offered spring semester (even-numbered years)

**MTH 4143 Real Analysis** **Three hours**

A systematic study of topics in mathematical analysis such as the real number system, sequences, limits, continuity, differentiation, and integration. Prerequisites: MTH 2123 and 3103

Offered spring semester (odd-numbered years)

## MUS (Music)

**MUS 0971 Applied Organ** **One hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. For music majors and minors who do not meet requirements for the applied study in the major area. Credits do not count toward applied requirements or toward graduation hours. May be repeated each semester.

Offered each semester

**MUS 0980, 1980, 3980 Masterclass in Voice** **No credit**

Required of all students taking applied voice. A weekly performance class in which students have the opportunity to perform for their peers and receive constructive remarks regarding technique, interpretation, and general performance procedures. Specific topics are addressed at the discretion of the instructors.

Offered each semester

**MUS 0981 Applied Voice** **One hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. For music majors and minors who do not meet requirements for applied voice credit. Credits do not count toward applied voice requirements or graduation hours. May be repeated each semester. Prerequisite: consent of instructor

Offered each semester

**MUS 0990, 1990, 3990 Masterclass in Piano** **No credit**

Required of all students taking applied piano. A weekly performance class in which students have the opportunity to perform for their peers and receive constructive remarks regarding technique, interpretation, and general performance procedures. Specific topics are addressed at the discretion of the instructors.

Offered each semester



**MUS 0991 Applied Piano** **One hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. For music majors and minors who do not meet requirements for applied piano credit. Credits do not count toward applied piano requirements or toward graduation hours. May be repeated each semester.

Prerequisite: consent of instructor

Offered each semester

**MUS 1103 Elements of Music Theory** **Three hours**

Rudiments of music including meter, intervals, scales, key signatures, triads, and seventh chords. Includes fundamental aural skills and an introduction to notation and sequencing software used in subsequent music theory course work. Credit does not count as hours toward any music department field of study or the Youth and Worship Ministries major. May be waived by examination.

Offered fall semester

**MUS 1111 Musicianship I** **One hour**

A course developing the aural skills of singing at sight and taking dictation. Musical materials representative of diatonic harmony of the common practice period. Two hours laboratory per week. Prerequisite: MUS 1103 or waiver Corequisite: MUS 1113

Offered spring semester

**MUS 1113 Theory I** **Three hours**

A study of diatonic harmony of the common practice period with emphasis on analytical and part-writing skills. Pre-requisite: MUS 1103 or waiver Corequisite: MUS 1111

Offered spring semester

**MUS 1203 Liberal Arts Foundations for the Musician** **Three hours**

An introduction to the music curriculum for all music majors and minors. Consideration of philosophical issues fundamental to the arts. Historical survey of music literature of the Western world, with emphasis on style, form, appreciation, and application of perception skills. (Same as COM 1203) Prerequisite or corequisite: EGL 1013

Offered spring semester

**MUS 1731, 3731 Music Theatre Methods** **Each course, one hour**

Introduction to the art of stage craft through the medium of musical theatre, operetta, and opera. Stage movement and characterization skills are developed. May be repeated for additional credit. A not-for-credit enrollment option is available.

Offered spring semester

**MUS 1732, 3732 Music Theatre Production** **Each course, two hours**

Introduction to the art of stage craft through the medium of musical theatre, operetta, and opera. Stage movement and characterization skills are developed through performance in a fully staged production. May be repeated for additional credit. A not-for-credit enrollment option is available.

Offered each year



## COURSE DESCRIPTIONS

### **MUS 1781, 3781 Applied Accompanying Each course, one hour**

One half-hour private lesson per week devoted primarily to vocal literature currently being accompanied. Student required to accompany one vocalist (or an equivalent ensemble) attending their voice lesson every other week and rehearsing with the student 30 minutes per week. Vocalists attend the applied accompanying lesson at least twice during the semester to work on ensemble issues. Minimum amount of daily practice to be determined by instructor. Prerequisite: consent of instructor

Offered each semester

### **MUS 1791 Applied Guitar One hour**

One half-hour private lesson per week. Student must supply guitar for practice and lessons. Minimum amount of daily practice to be determined by instructor.

Prerequisite: consent of instructor

Offered upon sufficient request

### **MUS 1831, 3831 Women's University Chorus Each course, one hour**

The ensemble performs a variety of styles from the standard collegiate and sacred choral literature. The group performs primarily for on-campus functions. Audition required. A not-for-credit enrollment option is available.

Offered each semester

1831 may be repeated each semester of lower-division study

3831 may be repeated each semester of upper-division study

### **MUS 1841, 3841 Instrumental Ensemble Each course, one hour**

The ensemble performs a variety of styles from the standard instrumental ensemble literature. The group performs at least once per semester. Two hours of rehearsal each week in addition to performances. Audition required. A not-for-credit enrollment option is available.

Offered each semester

1841 may be repeated each semester of lower-division study

3841 may be repeated each semester of upper-division study

### **MUS 1851, 3851 Music Ministries Ensemble Each course, one hour**

The focus of this ensemble is on the musical portion of the worship service and various ways in which music may be structured to complement the stylistic preferences of different denominational settings and worship styles. The group gains experience by performing music for area churches, chapel services, schools, and civic organizations. Includes vocalists and instrumentalists. Two hours of rehearsal required each week plus additional rehearsals for performances. Audition required. A not-for-credit enrollment option is available.

Offered each semester

### **MUS 1861 Jazz/Pop Ensemble One hour**

An ensemble designed to give woodwind, brass, and percussion instrumentalists performance opportunities in the genres of jazz and pop music. The group performs at home ball games and other venues. Two hours of rehearsal each week in addition to performances. Audition required. A not-for-credit enrollment option is available.

Offered each semester

**MUS 1891 Applied Instrument** **One hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. Available for instrumental music minors.

Offered upon sufficient request

**MUS 1892 Applied Instrument** **Two hours**

One 1-hour or two half-hour private lessons per week. Minimum amount of daily practice to be determined by instructor. Available for instrumental music minors.

Offered upon sufficient request

**MUS 1901 Basic Guitar Techniques** **One hour**

Class instruction focused on guitar playing styles and techniques applicable to church settings. Primary emphasis is given to playing rhythm guitar; some lead guitar techniques are addressed.

Offered upon sufficient request

**MUS 1911 Lyric Diction I** **One hour**

Foreign language pronunciation for singers through application of the International Phonetic Alphabet with emphasis on Italian and introduction to German. Two fifty-minute sessions per week.

Offered spring semester (odd-numbered years)

**MUS 1921 Lyric Diction II** **One hour**

Continuation of German pronunciation study with emphasis on French. Two fifty-minute sessions per week. Prerequisite: MUS 1911

Offered fall semester (odd-numbered years)

**MUS 1931, 1941 Class Piano I, II** **Each course, one hour**

Basic keyboard techniques and application of music fundamentals to the keyboard, including major and minor scales, modes, chord progressions, arpeggios, harmonization, improvisation, accompaniments, transposition, solo and ensemble repertoire. Two hours of class each week and a half-hour of practice daily.

Prerequisite: ability to read music notation

1931 offered fall semester

1941 offered spring semester

**MUS 1951, 1961 Class Lessons in Voice** **Each course, one hour**

Group instruction with emphasis on foundational vocal techniques, practice skills, and beginning song literature. Two hours of class weekly and a half-hour of practice daily.

1951 offered fall semester

1961 offered spring semester

**MUS 1971, 3971 Applied Organ** **Each course, one hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. Prerequisite: see requirements to enter each level of work in organ as listed on pages 120 and 123

Offered each semester

1971 may be repeated each semester of lower-division study

3971 may be repeated each semester of upper-division study

## COURSE DESCRIPTIONS

### **MUS 1972, 3972 Applied Organ Each course, two hours**

One 1-hour or two half-hour private lessons per week. Minimum amount of daily practice to be determined by instructor. Prerequisites: see requirements to enter each level of work in organ as listed on pages 120 and 123

Offered each semester

1972 may be repeated for each semester of lower-division study

3972 may be repeated for each semester of upper-division study

### **MUS 1981, 3981 Applied Voice Each course, one hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. Prerequisites: see requirements to enter each level of work in voice major as listed on pages 120 and 123, and consent of instructor

Offered each semester

1981 may be repeated for each semester of lower-division study

3981 may be repeated for each semester of upper-division study

### **MUS 1982, 3982 Applied Voice Each course, two hours**

One 1-hour or two half-hour private lessons per week. Minimum amount of daily practice to be determined by instructor. Prerequisites: see requirements to enter each level of work in voice major listed on pages 120 and 123, and consent of instructor

Offered each semester

1982 may be repeated for each semester of lower-division study

3982 may be repeated for each semester of upper-division study

### **MUS 1991, 3991 Applied Piano Each course, one hour**

One half-hour private lesson per week. Minimum amount of daily practice to be determined by instructor. Prerequisites: see requirements to enter each level of work in piano major as listed on pages 120 and 123, and consent of instructor

Offered each semester

1991 may be repeated for each semester of lower-division study

3991 may be repeated for each semester of upper-division study

### **MUS 1992, 3992 Applied Piano Each course, two hours**

One 1-hour or two half-hour private lessons per week. Minimum amount of daily practice to be determined by instructor. Prerequisites: see requirements to enter each level of work in piano major as listed on pages 120 and 123, and consent of instructor

Offered each semester

1992 may be repeated for each semester of lower-division study

3992 may be repeated for each semester of upper-division study

### **MUS 2003 The Arts in Western Culture Three hours**

An introduction to music and the visual art forms. Consideration is given to philosophical issues fundamental to the arts. Selected masterworks of instrumental and/or vocal music, architecture, painting, and sculpture are studied, with emphasis on style, form, and application of perception skills.

Offered fall and spring (even-numbered years)

### **MUS 2111 Musicianship II One hour**

A course developing the aural skills of singing at sight and taking dictation. Musical materials representative of diatonic and chromatic harmony of the common practice period. Two hours laboratory per week. Prerequisite: MUS 1111

Offered fall semester

**MUS 2113 Theory II** **Three hours**

A study of chromatic harmony of the common practice period with emphasis on analytical and part-writing skills. Prerequisite: MUS 1113

Offered fall semester

**MUS 2121 Musicianship III** **One hour**

A course developing the aural skills of singing at sight and taking dictation. Musical materials representative of chromatic harmony of the common practice period and selected modern styles. Two hours laboratory per week. Prerequisite: MUS 2111

Offered spring semester

**MUS 2123 Theory III** **Three hours**

A study of the practices of modern composers (beginning with Debussy) with emphasis on analytical skills and creative writing in selected styles. Prerequisite: MUS 2113

Offered spring semester

**MUS 2151 Functional Keyboard Skills I** **One hour**

Acquisition of keyboard skills beyond note-reading, such as playing from chord charts, harmonization in various styles, transposition, and improvisation. Prerequisite: MUS 2113 or consent of instructor

Offered upon sufficient request

**MUS 2161 Functional Keyboard Skills II** **One hour**

A continuation of skills in reading chord charts, harmonization in various styles, transposition, improvisation, and open-score reading. Prerequisite: MUS 2151 or consent of instructor

Offered upon sufficient request

**MUS 2232 Contemporary Worship Music in Theory and Practice** **Two hours**

An integrated study of music theory with an emphasis on emerging pop symbols and popular and jazz harmonies used in current worship music. The creation of worship charts, lead sheets, chord substitution, simplified hymn harmonizations, segues, intros, outros, turnarounds, and arranging are studied in detail. Prerequisites: MUS 2111 and 2113

Offered spring semester (odd-numbered years)

**MUS 2503 Worship Ministry I: Orientation** **Three hours**

An overview of church worship ministry with emphasis on leading worship services in class, and observing church worship services and rehearsals in the local area. Students learn the dynamics of healthy church ministry and the role worship plays in the overall mission of a church. Students learn to design a basic worship service, then how to evaluate and critique in order to improve one's leading skills. Guided field observation required. Prerequisites: MUS 1111 and 1113

Offered fall semester

## COURSE DESCRIPTIONS

### **MUS 2513 Worship Ministry II: Materials and Methods** **Three hours**

An advancing study of church worship ministry resources with emphasis on specific denominational liturgy, visual arts in worship, and working effectively with church staff, other musicians, and congregation members. Guided field observation required. Prerequisites: MUS 1113 and 2503

Offered spring semester

### **MUS 2601 Accompanying Class** **One hour**

Various aspects of accompanying including how to analyze and rehearse music, how to maintain ensemble balance, and the working out of performance details involved with collaborative musical artistry. Repertoire presented is from standard vocal, choral, instrumental, and church music. Students gain experience and practice accompanying other students during the semester.

Offered upon sufficient request

### **MUS 2901 Guitar in Worship** **One hour**

Application of guitar skills to the worship setting. Prerequisite: MUS 1901 or waiver  
Offered upon sufficient request

### **MUS 2931, 2941 Class Piano III, IV** **Each course, one hour**

Continuation of keyboard techniques including major and minor scales, modes, chord progressions and inversions, arpeggios, harmonization, improvisation, vocal and instrumental accompaniments, vocal and instrumental score reading (including transposing instruments), solo and ensemble repertoire. Two hours of class each week and a half-hour practice daily. Prerequisite for 2931: MUS 1941 Prerequisite for 2941: MUS 2931

2931 offered fall semester  
2941 offered spring semester

### **MUS 3003 Masterpieces of Music** **Three hours**

An introduction to music, through the study of selected masterworks of concert and stage genres representative of a variety of historical periods. Emphases on style and form, understanding and appreciation, and application to other examples of the perception skills developed through the study of the selected works. Prerequisites: EGL 1023, HST 1013, and 1023

Offered spring semester

### **MUS 3101 Survey of Instruments** **One hour**

A survey of wind, string, and percussion instruments. Functional knowledge with a "hands-on" approach. Includes arranging projects utilizing *Finale* software. Two hours laboratory per week. Prerequisites: MUS 1111 and 1113

Offered fall semester (odd-numbered years)

### **MUS 3113 Harmonic Form and Analysis** **Three hours**

A study of the structure of the standard homophonic forms through analysis of 18th, 19th, and 20th century literature, and a brief introduction to contrapuntal procedures. This course also includes a major research-analysis project. Prerequisites or corequisites: MUS 1203 and 2123

Offered fall semester (odd-numbered years)

**MUS 3123 Counterpoint** **Three hours**

Exercises in analysis and writing of two- and three-part counterpoint in 18th century style. Prerequisites: MUS 3113 and consent of instructor

Offered upon sufficient request

**MUS 3201 Introduction to World Music** **One hour**

Overview of music of various world cultures studied in relation to religion including jazz, folk, and pop influences.

Offered upon sufficient request

**MUS 3213, 3223 History of Music I, II** **Each course, three hours**

The first course surveys the historical development of music from the pre-Christian era to 1750. The second covers music from 1750 to the present. Both courses include a major research-analysis project. Prerequisite: MUS 1203

3213 offered fall semester (even-numbered years)

3223 offered spring semester (odd-numbered years)

**MUS 3301 Choral Techniques** **One hour**

A study of rehearsal techniques including auditions, choral diction and tone, stylistic analysis, as well as score study, programming of repertoire, and organization and management. Prerequisite: MUS 2123 or consent of instructor

Offered fall semester (even-numbered years)

**MUS 3313 Public School Music Methods, P-8** **Three hours**

Methods and materials of teaching music in elementary/middle schools including the development of lesson plans, classroom observations, and role-playing a music teaching situation. Field experiences required. For music majors only. Prerequisites: MUS 2111, 2113, and Gate One

Offered spring semester (odd-numbered years)

**MUS 3323 Children's Music Ministry Methods** **Three hours**

Study of current and traditional philosophies, methods, and materials for use with preschool through sixth-grade church choirs. Field observations required.

Prerequisites: MUS 1111 and 1113 or consent of instructor

Offered spring semester (odd-numbered years)

**MUS 3411 Conducting I** **One hour**

Basic conducting patterns and techniques; score-reading, both choral and instrumental; study and preparation of graded choral music. Class meets two days per week.

Prerequisites: MUS 1111 and 1113 or consent of instructor.

Offered fall semester (odd-numbered years)

**MUS 3421 Conducting II** **One hour**

Advanced conducting techniques, score preparation, and interpretation. Emphasis on conducting assigned selections, the study of advanced choral works, and stylistic interpretation. Class meets two days per week. Prerequisite: MUS 3411 or consent of instructor

Offered spring semester (even-numbered years)

## COURSE DESCRIPTIONS

- MUS 3563 Audio Technology I** **Three hours**  
Introduction to multi-track recording, recording studios, and the technology involved in mixing and processing sound. Related subjects in setting up sound reinforcement systems, proper selection of microphones, and establishing the proper mix and sound quality. Also includes subjects such as acoustics, surround sound installation and set-up, digital audio workstations, and copyright law. An additional fee associated with this course.  
Offered fall semester
- MUS 3601 Music Practicum: Accompanying** **One hour**  
Student accompanies voice students at their lessons and rehearsals, musical theatre workshop rehearsals, or other accompaniment opportunities with the consent of the instructor. Prerequisite: MUS 1781  
Offered each semester
- MUS 3611 Music Practicum: Church Organist** **One hour**  
Student assumes the position of organist for a local church in the region and prepares and presents all organ music needed for the worship services of the church, which may include hymns, service music, choral anthem accompaniments, and solo voluntaries (prelude, offertory, communion music, postlude). Prerequisite: consent of instructor  
Offered each semester
- MUS 3621 Music Practicum: Student Conductor** **One hour**  
Selected specifically by the conductor of the Cathedral choir, a student is given opportunity to serve in various capacities, such as section leader, choral librarian, rehearsal conductor, and assistant conductor in performances. Assigned duties are tailored to offer practical experience in all aspects of choral and/or instrumental performance. Prerequisites: MUS 3421 and consent of instructor  
Offered each semester
- MUS 3651 Music Practicum: Chapel Leader** **One hour**  
Student serves the Chapel Program in a variety of capacities including participating with the music teams, attending planning meetings and rehearsals, assisting with overall set-up and programming, and evaluating the services. Student reports directly to the Instructor of Worship Ministry. Prerequisites: MUS 2503, 2513, and consent of instructor  
Offered each semester
- MUS 3661 Music Practicum: Technology** **One hour**  
Student serves as sound technician in a church, JBU Chapel, recording studio, audio post-production facility, radio station, etc. Prerequisite: MUS 3563 or consent of instructor  
Offered each semester



**MUS 3801 Cathedral Choir** **One hour**

The Cathedral Choir, open to students from all fields of study, performs standard collegiate choral literature of the various style periods. It is featured in the annual Christmas Candlelight Service and takes an annual tour during spring break. Admission by audition. May be repeated each semester. A not-for-credit enrollment option is available.

Offered each semester

**MUS 3900 Junior Recital** **No credit**

Presentation of a recital during the junior year. Must be enrolled in applied lessons in the area of performance during the semester of the recital. The student writes program notes that must be prepared in advance of the recital hearing and be approved by the faculty committee for distribution at the recital. Hearing must be held at least two weeks before the scheduled performance.

Offered each semester

**MUS 3951 Contemporary Worship Techniques** **One hour**

A forum for covering elements of vocal and piano technique and pedagogy using modern worship repertoire. Topics covered include improvisation, stylistic interpretation, harmonization, stage presence, and opportunity for students to perform repertoire with feedback from instructors and students. Prerequisites: successful completion of the Upper-Division Applied Proficiency in Voice exam and MUS 2941

Offered fall semester (odd-numbered years)

**MUS 4103 Music Arranging with MIDI** **Three hours**

Projects in transcription (adapting music composed for one musical medium to a different medium), music arrangements (free treatment of pre-existing material), and composition utilizing MIDI keyboards and sequencing software. Special emphasis on creative writing in a variety of styles. An additional fee associated with this course. Prerequisite: consent of instructor

Offered spring semester (even-numbered years)

**MUS 4191 Senior Presentation Preparation** **One hour**

Course designed to provide faculty mentoring for students enrolled in MUS 4910 Senior Presentation. An additional fee associated with this course. Corequisite: MUS 4910

Offered each semester

**MUS 4261 Piano Pedagogy** **One hour**

An overview of pedagogical trends, historical practices, methods, and contemporary issues in piano teaching. Prerequisite: consent of instructor

Offered upon sufficient request

**MUS 4262 Piano Literature** **Two hours**

A chronological survey of keyboard and piano literature from the 18th century to the present. Prerequisite: consent of instructor

Offered upon sufficient request

**MUS 4273 Organ Literature and Pedagogy** **Three hours**

A brief chronological survey of literature for the organ from the Renaissance to the present. Basic pedagogical source materials are included. Prerequisite: consent of instructor

Offered upon sufficient request



## COURSE DESCRIPTIONS

- MUS 4281 Vocal Literature** **One hour**  
A survey of vocal song literature, and analysis and comparison of styles of representative works. Prerequisite or corequisite: MUS 3223 or consent of instructor  
Offered spring semester (even-numbered years)
- MUS 4291 Choral Literature** **One hour**  
A brief chronological study of choral literature from the Renaissance to the present.  
Prerequisite: consent of instructor  
Offered upon sufficient request
- MUS 4382 Vocal Pedagogy** **Two hours**  
A study of vocal anatomy and pedagogical approaches as applied to the teaching of voice. Prerequisite: consent of instructor  
Offered spring semester (even-numbered years)
- MUS 4491, 4492, 4493 Selected Topics** **One to three hours**  
Study of a topic such as Twentieth Century Styles or Composition. A one-hour private lesson fee is charged per credit hour.  
Offering dependent upon student interest and faculty availability
- MUS 4553 Internship and Senior Presentation** **Three hours**  
An internship under the guidance of an experienced and qualified minister of music in an approved church music program, including a senior presentation. Prerequisite: consent of the Worship Ministries major advisor  
Offered each semester
- MUS 4563 Audio Technology II** **Three hours**  
Advanced topics from Audio Technology I including multi-track recording, processing sound, final mix-down and use of a digital studio workstation for master CD preparation. Includes study of microphone design, speaker design, acoustical environment and its selection for establishing the proper sound environment/mix quality. Includes class time in subjects such as sampling via MIDI, integration of video and sound tracks, and location recording. An additional fee associated with this course. Prerequisite: MUS 3563  
Offered spring semester
- MUS 4573 Public School Music Methods, 7-12** **Three hours**  
Contemporary methodology for teaching music in middle/junior and senior high schools, including philosophy of music education, psychology of music learning, curriculum development, classroom management, and evaluation. Field experiences and/or observations are required. Prerequisites: MUS 3313 and Gate Two  
Offered spring semester (even-numbered years)
- MUS 4900 Senior Recital** **No credit**  
Presentation of a recital during the academic year preceding graduation. Must be enrolled in applied lessons in the area of performance during the semester of the recital. The student writes program notes that must be prepared in advance of the recital hearing and be approved by the faculty committee for distribution at the recital. Hearing must be held at least two weeks before the scheduled performance.  
Offered each semester

**MUS 4910 Senior Presentation** **No credit**

Presentation of a project representing significant research and/or creative endeavor during the academic year preceding graduation. Projects must be approved by the department head, division chair, and faculty mentor. Prerequisites or corequisites: MUS 3113, 3213, and 3223 Corequisite: MUS 4191

Offered each semester

**PHY (Physics)**

**PHY 1101, 2101, 3101, 4101 Physics Practicum**

**Each course, one hour**

Experiences may involve teaching physics, radioisotope technology, electronics, atomic and nuclear physics, and sound and acoustics. Prerequisite: consent of instructor

Offered upon sufficient request

**PHY 1114 Fundamentals of Physics I**

**Four hours**

An introductory study of the principles of mechanics and waves and sound. Primarily for biology, construction management, and sports medicine majors. Three hours lecture-discussion and one two-hour laboratory per week. Prerequisites: MTH 1113 and 1122

Offered fall semester

**PHY 1124 Fundamentals of Physics II**

**Four hours**

An introductory study of the principles of thermodynamics, electricity and magnetism, and optics. Primarily for biology, construction management, and sports medicine majors. Three hours lecture-discussion and one two-hour laboratory per week. Prerequisite: PHY 1114

Offered spring semester

**PHY 2114 General Physics I**

**Four hours**

A study of the principles of mechanics and waves and sound. Primarily for biochemistry, chemistry, and engineering majors. Prerequisite: MTH 1134

Offered fall semester

**PHY 2124 General Physics II**

**Four hours**

A study of the principles of thermodynamics, electricity and magnetism, and optics. Primarily for biochemistry, chemistry, and engineering majors. Prerequisite: PHY 2114

Offered spring semester

**PHY 3113 Thermal Sciences**

**Three hours**

An introduction to the thermal sciences of mechanical engineering providing an overview of thermodynamics, fluid dynamics, and heat transfer. Three hours lecture-discussion per week. (Same as ME 3113) Prerequisites: MTH 1144 and PHY 2124

Offered fall semester

**PHY 3173 Selected Topics**

**Three hours**

Topics chosen from the many branches of physics such as optics, sound and acoustics, nuclear physics, astronomy, and theoretical physics. May be repeated for credit when content differs. Prerequisite: consent of instructor

Offered upon sufficient request

## COURSE DESCRIPTIONS

### **PHY 3223 Thermodynamics** **Three hours**

A continuation from ME/PHY 3113 of the study of the laws of classical thermodynamics with a brief introduction to compressible flow. Energy conservation in closed and flowing systems. Application to power and refrigeration cycles. Three hours lecture-discussion per week. (Same as ME 3223) Prerequisites: ME 3113 or PHY 3113 and MTH 1144

Offered spring semester

### **PHY 3313 Engineering Fields** **Three hours**

An integrated study of electric, magnetic, fluid, thermal, and other fields. Gauss's law and Laplace's and Poisson's equations with an introduction to Maxwell's equations. Numerical and graphical techniques. Two hours lecture-discussion and one three-hour laboratory per week. (Same as EN 3313) Prerequisites: PHY 2124 and MTH 2123

Offered fall semester

### **PHY 4123 Electromagnetics** **Three hours**

Application of Maxwell's equations to transmission lines, waveguides, and antennas. Includes antenna design. Three hours lecture-discussion per week. (Same as EE 4123) Prerequisite: EN 3313 or PHY 3313

Offered spring semester

## **POL (Political Science)**

### **POL 2113 American Government** **Three hours**

A study of the origins, institutions, and policies of national, state, and local government in the United States. The course promotes better citizenship through understanding and appreciation of American self-government. A biblical assessment of the various aspects of American government is offered.

Offered each semester

### **POL 2163 Irish Politics and Society** **Three hours**

A study of contemporary political and social development in Ireland, with special attention given to the political-religious conflict in Northern Ireland. Focus is on the application of Christian principles of peacemaking to political and social conflict. Activities include academic course work, guest lectures by Irish political leaders, and visits to important political/social sites in Ireland.

Offered Irish Studies Program

### **POL 2193H Honors: American Government** **Three hours**

A study of the origins, institutions, and policies of the national government in the United States, incorporating biblical assessments of various facets of the American system of government. Students formulate their own political views as informed by the principles and practices presented in course readings and class discussion. The course promotes better citizenship through understanding and appreciation of American self-government. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered spring semester (odd-numbered years)

- POL 2213 Comparative Politics** **Three hours**  
A comparative study of major political systems focusing on the principles, institutions, and customs that constitute the various regimes of the world.  
Offered fall semester (odd-numbered years)
- POL 2473 Methods of Political Analysis** **Three hours**  
This course introduces students to the logic and techniques of quantitative and qualitative analysis in political science. Special attention is given to survey research, computer applications, and data analysis (using SPSSX).  
Offered spring semester (even-numbered years)
- POL 3003 Political Philosophy** **Three hours**  
A study of ancient and modern political philosophies utilizing primary texts. The course addresses the place of political philosophy in the broader field of philosophy, emphasizing a worldview approach as a means of understanding human existence. Topics include nature, reason, freedom, justice, right, property, law, religion, will, passions, power, customs, and community. (Same as RPH 3013)  
Offered each semester
- POL 3093H Honors: Political Philosophy** **Three hours**  
A study of ancient and modern political philosophies that incorporates biblical assessments of political themes and Christian critiques of classical and modern political thought. Students formulate their own political views as informed by the principles and practices presented in course readings and class discussion. (Same as RPH 3093H) Prerequisite: admission to the Honors Program or permission of the Honors Committee  
Offered spring semester (even-numbered years)
- POL 3123 The American Congress** **Three hours**  
A study of the U.S. Congress focusing on its origin, development, and modern practice as a representative and deliberative institution. The Congress is examined in the context of its relationship to the other two branches of the national government and its general role in the federal constitution. Prerequisite: POL 2113  
Offered upon sufficient request
- POL 3133 Politics of Social Policy** **Three hours**  
An examination of the origin, logic, structure, and function of America's social welfare state. Areas explored include income support, poverty and welfare, social security, health care, and affirmative action. Particular emphasis is placed upon evaluating the competing goals of social policy from a Christian perspective. Students will learn how to apply their faith to matters of public policy.  
Offered fall semester (even-numbered years)
- POL 3143 The American Presidency** **Three hours**  
A study of the American presidency focusing on its origin, development, and modern practice. The executive branch is examined in the context of its relationship to the other two branches of the national government and its general role in the federal constitution. Prerequisite: POL 2113  
Offered spring semester (even-numbered years)

## COURSE DESCRIPTIONS

**POL 3153 Political Parties and Democracy** **Three hours**

An introduction to political parties in western democracies, with a specific focus on parties in the United States and Great Britain. Students will learn why parties develop, how they function, the role they play in democratic representation, and their relationship to voting and the election process. Particular attention is devoted to exploring how political parties manage political conflict and how religious interest groups use parties to influence the political process.

Offered fall semester (even-numbered years)

**POL 3213 Faith and Politics** **Three hours**

A study of the relationship between faith and politics with particular attention devoted to understanding the role of Christians in the democratic process. Specific topics discussed include the normative role of faith and politics, religion and political behavior, religion and the Constitution, and the historical and current role of religious individuals and organizations in the public square. Prerequisites: POL 2113

Offered fall semester (even-numbered years)

**POL 3353 International Relations** **Three hours**

An examination of the development of international relations and international organizations and how Christians have responded to the issues of war and peace.

Prerequisites: HST 1013 or 1023 and POL 2113

Offered spring semester (even-numbered years)

**POL 3413 Selected Topics** **Three hours**

Special topics in Political Science are considered.

Offered upon sufficient request

**POL 4113 Latin American Politics** **Three hours**

A study of the constitutional development of Central and South American nations, with special attention given to the political principles and practices of contemporary Latin America. Prerequisites: POL 2213 or 3353; POL 2473 recommended

Offered upon sufficient request

**POL 4233 Elections and Voting Behavior** **Three hours**

An examination of the role of elections in American politics. Topics include democratic electoral systems, participation, determinants of vote choice, media effects, and the influence of public opinion on the policy process. Particular attention is devoted to understanding the role and influence of Christians in the electoral process. Prerequisite: POL 2473 recommended

Offered spring semester (odd-numbered years)

**POL 4243 Constitutional Law** **Three hours**

A seminar on the origin, development, and contemporary practice of American constitutionalism as expressed through interpretations of the U.S. Constitution by the U.S. Supreme Court. Topics addressed include the institutional structure of federal government, checks and balances, federalism, the commerce power, the Bill of Rights, and the Fourteenth Amendment. Prerequisites: POL 2113 and junior standing or consent of instructor

Offered fall semester (even-numbered years)

**POL 4313 Christianity and the Legal Profession Three hours**

A theoretical and practical study of the connection between Christian teachings and a career in American law. Students strive to determine how they will integrate their faith and the practice of law. Prerequisite: consent of pre-law advisor

Offered spring semester (odd-numbered years)

**POL 4511, 4512, 4513 Independent Study One to three hours**

Supervised exploration of topics of special interest to the student. The course consists of large assignments of supervised reading, regular consultation with the supervising professor, and written analysis of readings, as assigned by the professor. Prerequisite: 15 hours of political science/history

Offered upon sufficient request

**POL 4613 Seminar in United States Politics Three hours**

An introduction to methods of political research, philosophies of political science, and the relationship between the study of political science and a Christian worldview. Students research a particular topic in U.S. politics. Prerequisites: POL 2473 and nine additional hours of political science

Offered fall semester (odd-numbered years)

**POL 4711, 4712, 4713 Internship One to three hours**

Fieldwork in politics or law combined with reading and writing assignments that explore the theory and practice of these fields. One credit hour is earned for each 45 hours of experience. Prerequisite: consent of supervising instructor

Offered upon sufficient request

## **PSY (Psychology)**

**PSY 1013 Introductory Psychology Three hours**

A scientific study of the principles underlying human behavior. The student is introduced to the theory, research, and practice that characterize modern psychology.

Offered each semester

**PSY 1093H Honors: Introductory Psychology Three hours**

A scientific study of the principles underlying animal and human behavior, focusing on the development of psychology in relation to other academic disciplines. Critical thinking and integrative themes are stressed by using in-class exercises and formal projects. Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered fall semester

**PSY 1101 Orientation to Psychology One hour**

Designed to help students develop the knowledge and skills that will enable them to make intelligent choices about their future in the discipline. Topics for discussion include the changing nature of psychology, departmental resources and goals, career development, and graduate school. Not required of majors who upon matriculation to JBU have completed more than 12 transferable hours in psychology.

Offered fall semester

## COURSE DESCRIPTIONS

### **PSY 2123 Psychology of Relationship Development Three hours**

A foundation course that integrates biblical and psychological literature in the area of interpersonal, marriage, and family relationships. Coursework includes analysis and application of current theory and psychological research on gender differences, family of origin issues, sexuality, personality types, communication styles, forgiveness, dating, and emotional intelligence. This course may not be audited. (Same as FAM 2123)  
Offered spring semester

### **PSY 2203 Theories of Personality Three hours**

A study of the development, organization, and dynamics of personality with references to theories of personality developed in the 20th century. Prerequisite: PSY 1013  
Offered spring semester

### **PSY 2233 Theories of Counseling Three hours**

A study of major counseling theories. Includes dynamic, existential, humanistic, gestalt, cognitive-behavioral, reality, and family systems theories of counseling and the most useful strategies from each. For the beginning student of counseling.  
Prerequisite: PSY 1013  
Offered fall semester

### **PSY 2243 Introduction to Therapeutic Interviewing Three hours**

Basic elements of interviewing, setting conditions for psychological growth, and the development of effective action plans for healthy psychological change. Prerequisite: PSY 1013  
Offered spring semester

### **PSY 2383 Introductory Statistics Three hours**

A general statistics course that stresses a conceptual understanding of statistical procedures, and their appropriate use and interpretation. The course uses spreadsheet applications, current behavioral research publications, and examples from current events to teach critical thinking skills. Topics include descriptive statistics, the normal distribution, probability, and inferential statistics. Prerequisites: PSY 1013 and either an ACT Math score of at least 19 or equivalent or MTH 0153  
Offered each semester

### **PSY 2393 Research Methods Three hours**

An introduction to research methods in psychology that stresses critical thinking about methodological issues. Research skills are developed in hypothesis construction, research design, interpretation of statistical results, scientific writing, library and internet research, and presentation of results to a professional audience. Prerequisites: PSY 1013 and 2383  
Offered each semester

### **PSY 2413 Developmental Psychology Three hours**

A study of the physical, cognitive, emotional, and social development of the human from conception through adulthood. (Same as FAM 2413) Prerequisite: PSY 1013  
Offered each semester



**PSY 3203 Psychological Testing** **Three hours**

An examination of the theory, interpretation, and appropriate use of individual and group tests of personality, mental ability, aptitude, achievement, and interest.

Prerequisites: PSY 1013 and 2383

Offered fall semester (odd-numbered years)

**PSY 3383 History of Psychology** **Three hours**

A study of the historical and theoretical development of psychology. Emphasis is placed on persons, concepts, problems, and systems from which current psychology evolved. Prerequisites: PSY 1013 and 2393

Offered spring semester

**PSY 3411, 3412, 3413 Selected Topics** **One to three hours**

Topics chosen from a variety of topics related to psychology. May be repeated for credit when a different topic is studied. Prerequisite or corequisite: PSY 1013

Offered upon sufficient request

**PSY 3423 Social Psychology** **Three hours**

An investigation of how the behavior, feelings and thoughts of an individual are influenced or determined by the behavior and characteristics of others. Topics for discussion include attraction, attitudes, aggression, persuasion, and group behavior.

Prerequisite: PSY 1013

Offered spring semester

**PSY 4213 Abnormal Psychology** **Three hours**

The nature, causes, and treatment of maladaptive behavior including personality disorders, psychoses, reactions to stress, anxiety disorders, and other dysfunctions.

Prerequisite: PSY 1013; PSY 2233 recommended

Offered fall semester

**PSY 4262, 4263 Field Experience** **Two or three hours**

Placement in a variety of off-campus settings to gain practical exposure to the professional field. Open to psychology majors. May be repeated once for credit with consent of instructor. A student may receive a letter grade for a maximum of 3 credit hours; any additional hours will be graded 'S' or 'U' Students must supply transportation to the field placement sites. Prerequisites: PSY 1013 and 2233; PSY 2243 recommended

Offered fall semester

**PSY 4333 Cognitive Psychology** **Three hours**

A study of the major principles, research methods, and empirical findings of cognitive psychology, including attention, memory, imagery, categorization, language, and problem solving. Prerequisites: PSY 1013 and 2393

Offered spring semester (even-numbered years)

**PSY 4343 Theories of Learning** **Three hours**

A study of the major theories, research methods, and empirical findings of animal and human learning. Classical and operant conditioning paradigms are emphasized. Prerequisites: PSY 1013 and 2393

Offered spring semester (odd-numbered years)



## COURSE DESCRIPTIONS

### **PSY 4353 Behavioral Neuroscience** **Three hours**

A study of the biological bases of behavior. Topics for consideration include neuroanatomy, neuropsychology, learning and memory, emotion, drug effects, and the biological correlates of mental disorders. Prerequisite: PSY 1013; PSY 2393 strongly recommended

Offered fall semester

### **PSY 4411, 4412, 4413 Independent Research in Psychology** **One to three hours**

Student-directed research supervised by a member of the psychology faculty.

Prerequisites: PSY 4453 and consent of a supervising instructor

Offered upon sufficient request

### **PSY 4453 Research Seminar** **Three hours**

An opportunity for students to develop research skills in a content area. May focus on specific areas such as social or cognitive psychology, with the goal of competing and presenting an empirical research project. Prerequisites: PSY 2383 and 2393

Offered fall semester

### **PSY 4493 Seminar in Psychology** **Three hours**

A capstone in the discipline emphasizing contemporary issues and an approach to psychology from a Christian perspective. Prerequisites: PSY 2393 and six hours of BBL. Prerequisite or corequisite: PSY 3383

Offered spring semester

## **RE (Renewable Energy)**

### **RE 1113 Introduction to Renewable Energy** **Three hours**

A exploration of the technologies of renewable energy emphasizing scientific principles and practical conversion applications as well as the economic, environmental, and political aspects of energy production and use from fossil fuels to renewable energy resources.

Offered fall semester

### **RE 2113 Introduction to Energy Science** **Three hours**

A review of electrical systems, thermodynamics, heat transfers, and fluid mechanics concepts necessary to prepare the student for an understanding of the renewable energy courses. Basic energy economics and an overview of the existing and future energy supply systems. Prerequisite: RE 1113

Offered spring semester

### **RE 2121 Practicum in Renewable Energy I** **One hour**

An introduction to the maintenance and taking experimental measurements of renewable energy equipment. Prerequisite: RE 2113 or PHY 2114

Offered fall semester

**RE 2131 Practicum in Renewable Energy II** **One hour**

A continuation of RE 2121. Prerequisite: RE 2121

Offered spring semester

**RE 3123 Bio-fuels and Biomass** **Three hours**

An introduction to power production from different biomass resources. Topics include: bio-energy sources (agricultural crops and organic wastes); combustion of solid biomass; production of gaseous and liquid fuels from biomass; and environmental benefits and economic impacts of biomass conversion. Prerequisites: RE 2113 or ME 3113 and CHM 2154

Offered fall semester

**RE 3143 Wind Energy** **Three hours**

This lecture covers all relevant subjects of wind energy systems. Concepts of wind meteorology, wind resource analysis, and aerodynamics applied to wind turbines are covered. Students will utilize wind related software packages and perform lab sessions on power turbine performance and wind related measurements. Prerequisite: RE 2113 or ME 3113

Offered spring semester

**RE 3163 Solar Energy** **Three hours**

This lecture covers all relevant subjects of solar thermal energy and solar photovoltaic system design. Subtopics include solar geometry, solar meteorology and physical principles of radiation conversion, and radiation laws and heat transfer. Solar PV and solar thermal laboratory sessions are included. Prerequisite: RE 2113 or ME 3113

Offered fall semester

**RE 4124 Renewable Energy Capstone** **Four hours**

This is a project-based course done under the supervision of a faculty member. The student develops a feasibility study for a renewable energy project for a specific site. They apply all the methods and know-how acquired during their classes and present their case study in a formal presentation or poster session. Prerequisites: RE 3123, 3143, and 3163

Offered spring semester

## **RPH (Religion and Philosophy)**

**RPH 3003 Introduction to Philosophy** **Three hours**

A survey of classical writings and themes in the study of philosophy including religion, knowledge, the human self, and the problem of evil. Major Enlightenment and contemporary worldviews, such as naturalism, existentialism, and postmodernism, are examined from a Christian perspective. Prerequisites: EGL 1023, HST 1013, and 1023

Offered each semester

## COURSE DESCRIPTIONS

### **RPH 3013 Political Philosophy** **Three hours**

A study of ancient and modern political philosophies utilizing primary texts. The course addresses the place of political philosophy in the broader field of philosophy, emphasizing a worldview approach as a means of understanding human existence. Topics include nature, reason, freedom, justice, right, property, law, religion, will, passions, power, customs, and community. (Same as POL 3003)

Offered each semester

### **RPH 3093H Honors: Political Philosophy** **Three hours**

A study of ancient and modern political philosophies that incorporates biblical assessments of political themes and Christian critiques of classical and modern political thought. Students formulate their own political views as informed by the principles and practices presented in course readings and class discussion. (Same as POL 3093H) Prerequisite: admission to the Honors Program or permission of the Honors Committee

Offered spring semester (even-numbered years)

### **RPH 3323 Philosophy of the Christian Faith** **Three hours**

An advanced study of major issues in a Christian approach to philosophy. The course often centers around the works of a major Christian philosopher as a basis for discussion and evaluation. Prerequisite or corequisite: RPH 3003

Offered each semester

### **RPH 3333 History of Philosophy** **Three hours**

A survey of the development of the Western philosophical traditions from Plato to Derrida, based on a close reading of primary texts. Emphasis is placed on how Christian thought can be enriched by and/or can critique the major developments in Western philosophy.

Offered spring semester (even-numbered years)

### **RPH 3533 Introduction to Islam** **Three hours**

An examination of the religion, history, and culture of Islam. The study traces the growth and development of Islamic traditions across time and place, looking in particular at how Muslims understand their own faith tradition in relation to broader human experience expressed in literature and the arts. Focus is on primary sources. Prerequisite: junior standing or consent of instructor

Offered spring semester (even-numbered years)

### **RPH 3543 Introduction to Hinduism and Buddhism** **Three hours**

An examination of the "Eastern" religious traditions of Hinduism and Buddhism. The survey includes historical aspects—following the growth and development of these religious traditions across time and place, as well as theological aspects—considering how each tradition approaches issues such as divinity, nature, humanity, salvation, sin, community, and ritual. Focus is on primary sources. Prerequisite: junior standing or consent of instructor

Offered spring semester (odd-numbered years)

**RPH 4423 Ethics** **Three hours**

A systematic and critical study of the theoretical basis of human morality. Students evaluate historical ethical systems, develop a biblically based system of ethics, and apply that system to various current events and lifestyle issues. Prerequisites: RPH 3003 and POL 3003 or RPH 3013

Offered each semester

**RPH 4433 Christian Apologetics** **Three hours**

A study of the defense of historic Christian faith against the challenges of modernism, postmodernism, naturalism, evil, etc. Various methods of defense are examined in light of the nature of the Christian faith and of major opposing systems.

Prerequisites or corequisites: RPH 3003 and POL 3003 or RPH 3013.

Offered fall semester (odd-numbered years)

**RPH 4481, 4482, 4483 Selected Topics** **One to three hours**

Topics are chosen from some area of religion and philosophy. The student may also do independent study and research under the supervision of the instructor.

Prerequisite: consent of instructor

Offered upon sufficient request

## **SST (Social Studies)**

**SST 1113 Introduction to Sociology** **Three hours**

Understanding sociological research and how to apply it to aid in developing a global perspective of today's world. Topics of emphasis include the individual and society, structures of power, and social institutions common to all cultures and societies. The sociology of the body—health and illness, sexuality, and aging—is also discussed.

Offered online, upon sufficient request

**SST 1133 Cultural Geography** **Three hours**

Use of cartographic media as a means of communication. Instruction in techniques of interpretation of such media. Meets state requirements for elementary and secondary teachers.

Offered spring semester (odd-numbered years)

**SST 1143 World Regional Geography** **Three hours**

General survey of world regions including a study of geographic factors which underlie strengths of world powers. Meets state requirements for elementary and secondary teachers.

Offered spring semester (even-numbered years)

**SST 2123 Cultural Anthropology** **Three hours**

The study of culture, language, economics, kinship, marriage, gender, social control, social stratification, religion, art, and cultural change from an applied anthropological perspective using case studies.

Offered fall semester

## COURSE DESCRIPTIONS

# TRUSTEES

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July 1, 2009 - June 30, 2010

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# ADMINISTRATION

---

- TRACY A. BALZER, Director of Christian Formation, 1997.  
B.A., Seattle Pacific University  
M.A., John Brown University
- STEPHEN T. BEERS, Vice President for Student Development, 1998.  
B.A., Taylor University  
M.S., Wright State University  
Ed.D., Ball State University
- ANDRE G. BROQUARD, Dean of Students/Director of Residence  
Life, 2002.  
B.A., Taylor University  
M.A., Regent University
- CHRISTOPHER L. CONFER, Director of Career Development, 2004.  
B.A., Anderson University  
M.Div., Anderson School of Theology
- DARRIN E. COON, Business Manager, 2005.  
B.S., M.S., Illinois State University
- DON W. CRANDALL, Vice President for Enrollment Management, 1985.  
B.A., M.S., Aurora University
- ROBYN D. DAUGHERTY, Director of Athletics, 1999.  
B.S., M.A., John Brown University
- A. BETH DAVIS, Director of Institutional Research and Assessment, 1995.  
B.S., John Brown University  
M.Ed., Clemson University
- TIMOTHY J. DINGER, Director of University Counseling Center, 2000.  
B.A., Texas Tech University  
M.A., Dallas Theological Seminary  
Ed.D., Texas Tech University
- KIM ELDRIDGE, Associate Vice President, Admissions and Financial Aid,  
2000.  
B.Mus.Ed., John Brown University
- PAUL J. ELDRIDGE, Director of Development and Planned Giving, 2003.  
B.S.E., John Brown University  
M.A., Simon Greenleaf University  
J.D., Trinity Law School

JOHN BROWN UNIVERSITY

J. RICHARD ELLIS, Dean of Graduate and Professional Studies, 1993.  
B.R.Ed., William Tyndale College  
M.Div., Biola University  
Ph.D., University of Michigan

EDWARD E. ERICSON III, Vice President for Academic Affairs, 1994.  
B.A., Calvin College  
M.A., Ph.D., Indiana University

MARY ANN GUINN, University Nurse, 1989.  
A.A., Cottey College  
B.S.R.N., University of Arkansas Medical Center, Little Rock

MARY E. HABERMAS, Director of the Library, 2001.  
B.A., University of South Carolina  
M.L.S., University of Oklahoma

KIMBERLY B. HADLEY, Vice President of Finance and Administration,  
2004.  
A.A., Westark Community College  
B.S.B.A., M.B.A., University of Arkansas

JOHN C. HILL, Northwest Arkansas, Director of Site Operations, 1978.  
B.A., John Brown University  
M.A., University of Arkansas

RONALD E. JOHNSON, Director of Walton International Scholarship  
Program, 1996.  
B.S., Devry Institute  
M.S., California Coast University  
M.S., John Brown University

JAMES L. KRALL, Vice President for University Advancement, 1996.  
B.A., Taylor University  
M.A., Ball State University  
Ed.D., University of Tennessee

REBECCA J. LAMBERT, Associate Dean of Academic Services and  
Registrar, 2000.  
B.S., Ball State University  
M.S., University of Arkansas

RITA A. LAMPHEAR, Director of Technical Support Services, 1980.  
B.S.E., Northeastern State University

RYAN A. MARTIN, Executive Director, CARE Clinic, Graduate and  
Professional Studies, 2008.  
B.A., Oklahoma Baptist University  
M.A., M.A., Ph.D., Southwestern Baptist Theological Seminary



## ADMINISTRATION

- APRIL L. MORETON, Director of Foundation and Corporate Relations, 2002.  
B.Mus., Texas Christian University  
M.A., Dallas Theological Seminary  
Ph.D., University of North Texas
- PAUL A. NAST, Chief Information Systems Officer, 1999.  
B.A., Judson College  
M.B.A., University of Phoenix
- ROBERT B. NORWOOD, Dean of Undergraduate Studies, Director of Assessment, 1998.  
B.S., M.S., Ph.D., Stanford University
- FRANCES L. O'NEAL, Associate Registrar for Undergraduate Studies, 1990.  
B.S., John Brown University
- GARY J. OLIVER, Executive Director of The Center for Relationship Enrichment, 1998.  
B.A., Biola University  
M.Div., Talbot Theological Seminary  
Th.M., Fuller Theological Seminary  
M.A., Ph.D., University of Nebraska
- STEVE ONNEN, Director of Development Services, 1999.  
B.S., John Brown University
- STEPHEN R. PASCHOLD, Instructional Services Librarian, 2004.  
B.A., M.A., M.L.S., University of British Columbia
- THOMAS L. PERRY, Controller, 1996.  
B.S., Friends University  
M.B.A., John Brown University
- ANDREA PHILLIPS, Director of University Communications, 2002.  
B.S., Texas Christian University  
M.A., Dallas Theological Seminary
- CALVIN E. PISTON, Associate Dean of Institutional Effectiveness, 1982.  
B.A., M.A., University of California, Davis  
Ph.D., University of Arkansas
- CHARLES W. POLLARD, President, 2004.  
B.A., Wheaton College  
J.D., Harvard Law School  
M.A., Oxford University  
Ph.D., University of Virginia
- RODNEY P. REED, University Chaplain, 2008.  
B.A., Sioux Falls College  
M.Div., Bethel Theological Seminary

JOHN BROWN UNIVERSITY

- JERRY ROLLENE, Director of Alumni and Parent Relations, 2004.  
B.S., John Brown University
- REBECCA J. ROTHFUSS, Director of Leader Scholars Institute, 1994.  
B.A., Bartlesville Wesleyan College  
M.S., Oklahoma State University
- SIMONE I. SCHRODER, Interlibrary Loan Services Librarian, 1988.  
B.A., Marycrest College  
D.C., Palmer College of Chiropractic  
M.L.I.S., University of Oklahoma
- GREGORY T. SMALLEY, Director of Church Relationship Ministries, 2005.  
B.S., Grand Canyon University  
M.A., Denver Seminary  
M.A., Psy.D., Biola University
- WILLIAM A. STEVENSON III, Director of International Programs, 1988.  
B.S., M.A., John Brown University
- BRENT C. SWEARINGEN, Instructional Services Librarian, 2006.  
B.A., University of Arkansas  
M.Ed., DePaul University  
M.S., University of Illinois
- TIFFANY S. TAYLOR, Associate Registrar and Academic Advisor, Graduate  
and Professional Studies, 2006.  
B.S., M.B.A., John Brown University
- ERNEST H. WHITMORE, General Academic Advisor, 1985.  
B.A., John Brown University  
M.Mus., University of North Texas
- JACQUELINE S. WRIGHT, Director of Student Support Services, 2005.  
B.S., M.Ed., Northeastern State University

# FACULTY

---

HOLLY J. ALLEN, Professor of Biblical Studies, 2003.

B.A., Harding University  
M.A., University of Iowa  
Ph.D., Talbot School of Theology

DAVID R. ANDRUS, Professor of Visual Arts, 1983.

B.S., John Brown University  
M.F.A., Syracuse University

JOEL R. ARMSTRONG, Assistant Professor of Visual Arts, 2003.

B.F.A., Texas Tech University  
M.F.A., Colorado State University

DONALD P. BALLA, Professor of Accounting, 1985-1992, 1994.

B.Mus., Southern Illinois University, Edwardsville  
M.Mus., Florida State University  
M.S., The American College  
Certified Public Accountant, Illinois  
J.D., University of Arkansas

CARY L. BALZER, Assistant Professor of Biblical Studies, 1998.

B.A., Seattle Pacific University  
M.Div., Asbury Theological Seminary  
Ph.D., University of Manchester

TRACY A. BALZER, Instructor of Interdisciplinary Studies, 1997.

B.A., Seattle Pacific University  
M.A.Min., John Brown University

LINDA L. BECKMAN, Associate Professor of Music, 1996.

B.S., Southern Nazarene University  
M.Mus., D.Mus.A., University of Oklahoma

JANE E. BEERS, Assistant Professor of Biology, 2005.

B.A., Taylor University  
M.Ed., Northeastern State University

LARRY N. BLAND, Associate Professor of Electrical Engineering, 2002.

B.S., John Brown University  
M.S., Southern Methodist University  
Ph.D., Ohio State University

JOHN BROWN UNIVERSITY

- JAMES R. BLANKENSHIP, Assistant Professor of Biblical Studies, 2002.  
B.A., Indiana University  
J.D., Vanderbilt University School of Law  
M.A., Gordon Conwell Theological Seminary  
Ph.D., University of Pennsylvania
- FRANK BLUME, Professor of Mathematics, 1995.  
B.A.C.H., M.S., Technical University of Berlin  
Ph.D., University of North Carolina
- H. TODD BOWDEN, Associate Professor of Kinesiology, 1997.  
B.A., M.S., University of Arkansas  
A.T.C., National Athletic Trainers Association
- HARRIET J. BRICKER, Assistant Professor of Education, 2008.  
B.S., M.Ed., Southwest Missouri State University
- DAVID E. BRISBEN, Professor of Christian Ministries, 1992.  
B.A., Erskine College  
M.Miss., M.C.E., Reformed Theological Seminary  
M.Div., Erskine Seminary  
Ph.D., Trinity Evangelical Divinity School
- JAMES E. BRUCE, Assistant Professor of Philosophy, 2008.  
A.B., Dartmouth College  
B.A., M.A., New College, The University of Oxford  
M.A., Ph.D., Baylor University
- DOYLE M. BUTTS, Professor of Economics and Business, 1971.  
B.Mus.Ed., Henderson State University  
M.B.A., Ph.D., University of Arkansas
- JAMES P. CALDWELL, Professor of Construction Management, 1985.  
B.S., John Brown University  
M.S., Purdue University  
Certified Professional Constructor  
Registered Land Surveyor, Arkansas
- JOHN V. CARMACK, Associate Professor of Marriage and Family Therapy, 1998.  
B.A., University of Arkansas  
M.Div., Trinity Evangelical Divinity School  
Ph.D., Texas Woman's University
- ROBBIE F. CASTLEMAN, Associate Professor of Bible and Theology, 2001.  
B.A., Loyola University  
M.A., Florida State University  
D.Min., University of Dubuque Theological Seminary
- DAVID A. CATER, Professor of Psychology, 1993.  
B.A., Pasadena College  
M.A., California State University, Los Angeles  
M.A., Ph.D., Fuller Seminary

- GRACE Y. DAVIS, Assistant Professor of Education, 1998.  
 B.A., University of the Redlands  
 M.A., Oral Roberts University
- BRIAN R. EICHELBERGER, Assistant Professor of Chemistry, 2008.  
 B.S., State University of New York  
 Ph.D., University of Colorado
- RICHARD L. FROMAN, Professor of Psychology, 1994.  
 B.A., M.A., California State University, Sacramento  
 Ph.D., University of Wyoming
- C. JOEL FUNK, Assistant Professor of Biology, 2009.  
 B.A., Tabor College  
 M.S., Ph.D., Kansas State University
- GLORIA J. GALE, Professor of Education, 2000.  
 B.S., M.M.E., Western Michigan University  
 M.L.S., Central Michigan University  
 Ph.D., Walden University
- J. BRADLEY GAMBILL, Associate Professor of English and Director,  
 Honors Scholars, 2005.  
 M.A., New Mexico State University  
 M.F.A., University of Iowa  
 Ph.D., Oklahoma State University
- TODD M. GOEHNER, Assistant Professor of Visual Arts, 2005.  
 B.S., John Brown University  
 M.F.A., University of Idaho
- DARREN T. GOULD, Instructor of Broadcasting, 2009.  
 B.A., M.A., Wheaton College
- KARA GOULD, Associate Professor of Communication, 2009.  
 B.A., M.A., Wheaton College  
 Ph.D., University of Utah
- BRIAN T. GREUEL, Professor of Biology, 1997.  
 B.S., Wheaton College  
 M.S., Ohio State University  
 Ph.D., Washington University
- GARY M. GUINN, Distinguished Professor and Professor of English, 1977.  
 B.S.E., John Brown University  
 M.A., Ph.D., University of Arkansas
- RONALD T. HABERMAS, Professor of Christian Formation, 1993.  
 B.R.E., William Tyndale College  
 M.Div., North American Baptist Seminary

JOHN BROWN UNIVERSITY

M.A., Wheaton Graduate School  
Ph.D., Michigan State University

AMANDA E. HIMES, Assistant Professor of English, 2006.

B.A., East Texas Baptist University  
M.A., Baylor University  
Ph.D., Texas A&M University

JONATHAN B. HIMES, Associate Professor of English, 2003.

B.A., Harding University  
M.A., Ph.D., Texas A&M University

S. NEAL HOLLAND, Associate Professor of Digital Media Arts, 1998.

B.A., Ouachita Baptist University  
M.A., Southwestern Baptist Theological Seminary  
M.F.A., National University

WILL C. HOLMES, Associate Professor of Engineering, 2009.

B.S., Southern Nazarene University  
Ph.D., Washington State University

JASON W. HOUGH, Assistant Professor of Communication and Drama,  
2002.

B.A., Southwestern Oklahoma State University  
M.S., John Brown University  
M.A., University of Arkansas

IVAN D. IGLESIAS, Assistant Professor of Spanish, 2009.

B.A., Universidad del Atlantico, Columbia  
M.A., University of Arkansas

DAVID E. JOHNSON, Professor of Psychology, 1980.

B.S., Houghton College  
M.A., Ph.D., University of Arkansas

GALEN K. JOHNSON, Associate Professor of Biblical Studies, 2002.

B.A., Wake Forest University  
M.Div., Princeton Theological Seminary  
Ph.D., Baylor University

PRESTON L. JONES, Associate Professor of History, 2003.

B.A., California State University  
M.A., Sonoma State University  
Ph.D., University of Ottawa

SCOTT L. JONES, Associate Professor of Political Science, 1999.

B.A., John Brown University  
M.A., University of Arkansas  
J.D., University of Colorado

## FACULTY

- MICHAEL D. KENNELLEY, Associate Professor of Business, 2000.  
B.A., University of Arkansas  
M.B.A., Pittsburg State University  
Ph.D., Oklahoma State University
- TIMOTHY W. KIDD, Associate Professor of Christian Ministries and  
Outdoor Leadership, 1999.  
B.A., Asbury College  
M.S., Aurora University  
M.Div., Asbury Theological Seminary  
Ph.D., Trinity Evangelical Divinity School
- YOUNG-GURL KIM, Professor of Mechanical Engineering, 1990.  
B.S., Han-Yang University, Korea  
M.S., University of Wyoming  
M.A., Ph.D., Princeton University
- PATRICIA A. KIRK, Associate Professor of English, 1998.  
B.A., University of California  
M.A., Tulane University  
Third Year Certificate in Mandarin Chinese, University of Hong Kong  
M.F.A., University of Arkansas
- EDWARD C. KLOTZ III, Professor of Intercultural Studies, 1996.  
B.S., John Brown University  
Th.M., Dallas Theological Seminary  
D.Miss., Trinity Evangelical Divinity School
- DANIEL W. LAMBERT, Professor of Youth Ministries, 2000.  
B.S., Fort Wayne Bible College  
M.R.E., Cincinnati Bible Seminary  
Ed.D., University of Cincinnati
- THOMAS R. LAMBORN, Assistant Professor of Education, 2003.  
B.S., Philadelphia Biblical University  
M.R.E., Grand Rapids Baptist Seminary  
Ed.D., Nova Southeastern University
- C. CAREY LAMPTON, Assistant Professor of Counselor Education, 2001.  
B.A., University of Arkansas  
M.A., Ph.D. Texas Tech University
- JASON M. LANKER, Assistant Professor of Graduate Youth Ministries,  
2007.  
B.A., The Master's College  
M.A., Ph.D., Talbot School of Theology

## JOHN BROWN UNIVERSITY

- KEVIN H. MACFARLAN, Associate Professor of Mechanical Engineering, 1993.  
B.S., M.S., Virginia Polytechnic Institute and State University  
Ph.D., University of Arkansas
- DANIEL S. MAIN, Assistant Professor of Physics, 2008.  
B.A., University of California  
M.S., Ph.D., University of Colorado
- CAROLE A. MAINES, Associate Professor of Counselor Education, 1995.  
B.S., John Brown University  
M.S., University of the Redlands  
Ph.D., University of Arkansas
- BOB C. MARTIN, Associate Professor of Visual Arts, 2008.  
B.A., Northeastern State University  
M.F.A., University of Arkansas
- JOHN B. McCULLOUGH, Professor of Business, 1974.  
B.S., B.A., John Brown University  
M.S., Oklahoma State University  
Certified Public Accountant, Arkansas
- AMANDA K. MOORE, Instructor of Business, 2006.  
B.S., M.B.A., John Brown University
- ROBERT H. MOORE, Instructor of History, 2007.  
B.A., M.A., University of Arkansas
- SUSAN Q. NEWTON, Assistant Professor of Chemistry, 2005.  
B.S., John Brown University  
Ph.D., University of Arkansas
- FRANKLYN C. NILES, Associate Professor of Political Science, 1999.  
B.A., University of California, Riverside  
M.A., Ph.D., University of Houston
- W. AARON NIVEN, Instructor of Interdisciplinary Studies, Men's Assistant Basketball Coach, 2007.  
B.S., M.Ed., University of Arkansas
- ROBERT B. NORWOOD, Associate Professor of Electrical Engineering, 1998.  
B.S., M.S., Ph.D., Stanford University
- PAT R. O'BRIEN, Assistant Professor of Business, 2004.  
B.S., Virginia Polytechnic Institute and State University  
M.B.A., Webster University
- NICK T. OGLE, Assistant Professor of Family Studies, 2007.  
B.S., John Brown University  
M.A., Ph.D., Denver Seminary



## FACULTY

- JEAN B. PARKER, Assistant Professor of Education, 2009.  
B.A., University of Maryland  
M.S., Arkansas State University  
M.S., University of Central Arkansas  
Ed.D., University of Arkansas
- CHARLES C. PASTOOR, Associate Professor of English, 2001.  
B.A., Calvin College  
M.A., Ph.D., Baylor University
- JENNIFER F. PASTOOR, Instructor of English, 2006.  
B.A., M.A., Baylor University
- MATTHIAS J. PEARSON, Assistant Professor of Construction Management,  
2004.  
B.S., John Brown University  
M.Arch., University of Minnesota  
Registered Architect, Arkansas
- CHARLES E. PEER, Professor of Visual Arts, 1987.  
B.A., Hendrix College  
M.F.A., University of Arkansas
- CALVIN E. PISTON, Professor of Mathematics, 1982.  
B.A., M.A., University of California, Davis  
Ph.D., University of Arkansas
- PETER F. POHLE, Associate Professor of Digital Media Arts, 2001-2005,  
2006.  
B.A. Equivalent, Berlin  
M.F.A., Syracuse University
- TRISHA D. POSEY, Assistant Professor of History, 2007.  
B.A., Grand Canyon University  
M.Phil., University of Kent at Canterbury  
Ph.D., University of Maryland
- RYAN L. RANA, Assistant Professor of Counselor Education, 2006.  
B.S., Central Missouri State University  
M.S., Harding University  
Ph.D., University of Louisiana
- WARREN B. ROBY, Professor of Language Studies, 2000.  
B.A., Wichita State University  
M.A., Ph.D., University of Kansas
- DONNA J. ROLLENE, Instructor of Music and Artist In Residence, 2004.  
B.Mus.Ed., John Brown University

JOHN BROWN UNIVERSITY

- CHARLES A. ROMIG, Professor of Counselor Education, 2008.  
B.S., University of Illinois  
M.A., Trinity Evangelical Divinity School  
Ph.D., Purdue University
- REBECCA J. ROTHFUSS, Instructor of Business, 1994.  
B.A., Bartlesville Wesleyan  
M.S., Oklahoma State University
- LEO SETIAN, Professor of Electrical Engineering, 1970.  
A.B., Brown University  
M.S., University of Rhode Island  
Ph.D., Montana State University
- CLARK A. SHEEHY, Instructor of Interdisciplinary Studies, Men's  
Basketball Coach, 2007.  
B.S., John Brown University  
M.S., Texas A&M University
- DON W. SIEMENS, Professor of Mathematics, 1984.  
B.S., John Brown University  
M.A., M.A.T., Southeast Missouri State University  
Ph.D., Southern Illinois University, Carbondale
- PAUL B. SMITH, Professor of Music, 1987.  
B.A., Tabor College  
M.Mus., Wichita State University
- STEPHEN P. SNEDIKER, Instructor of Cinema, 2009.  
B.S., John Brown University
- JEFFREY D. SODERQUIST, Instructor of Interdisciplinary Studies, Women's  
Basketball Coach, 1998.  
B.S., John Brown University
- JACOB H. STRATMAN, Assistant Professor of English, 2007.  
B.A., William Jewell College  
M.A., Missouri State University  
Ph.D., Marquette University
- CARLA B. SWEARINGEN, Assistant Professor of Chemistry, 2005.  
B.A., Hendrix College  
Ph.D., Loyola University
- JOSEPH J. THOMA, Assistant Professor of Sports Management, Women's  
Soccer Coach, 2002.  
B.A., Southern Nazarene University  
M.A., University of Arkansas

## FACULTY

- ROBERT E. TIMMONS, Assistant Professor of Business, 2004.  
B.S., Pittsburg State University  
M.B.A., John Brown University  
DBA, Anderson University
- WENDY SODERQUIST TOGAMI, Instructor of Business, 1999.  
B.A., Taylor University  
M.A., Ball State University
- SANDRA S. VAN THIEL, Professor of Education, 1974-1976, 1981.  
B.A., Moody Bible Institute  
M.Ed., University of Arkansas  
Ed.D., Oklahoma State University
- FERNANDO A. VEGA, Instructor of Renewable Energy, 2005.  
B.S., John Brown University  
M.Fin., Universidad Tecnológico De Honduras  
M.S., Carl von Ossietzky Universität, Germany
- DAVID H. VILA, Associate Professor of Religion and Philosophy, 1999.  
B.A., Covenant College  
M.A., M.Div., Covenant Theological Seminary  
Ph.D., St. Louis University
- TIMOTHY S. WAKEFIELD, Associate Professor of Biology, 2000.  
B.S., Union University  
M.A., University of Missouri  
Ph.D., Auburn University
- JOE F. WALENCIAK, Professor of Business, 1982.  
B.S., John Brown University  
M.B.A., Ph.D., University of Arkansas
- ROBERT R. WALKER, Associate Professor of Natural Science, 1999.  
M.S., University of Wisconsin  
B.S.E., Ed.D., University of Arkansas
- NEIL G. WARD, Assistant Professor of Visual Arts, 2007.  
B.A., College of the Ozarks  
M.F.A., Nottingham Trent University
- K. GARY WARNER, Professor of Journalism, 1993.  
B.A., Michigan State University  
M.S., University of Kansas
- RAYMOND T. WEST, JR., Associate Professor of Computer Science, 1987.  
B.S., New Mexico State University  
M.S., Virginia Polytechnic Institute and State University

JOHN BROWN UNIVERSITY

ERNEST H. WHITMORE, Instructor of Interdisciplinary Studies, 1985.

B.A., John Brown University

M.Mus., University of North Texas

JAN HELMUT WUBBENA, Professor of Music, 1977.

A.B., Lebanon Valley College

M.Mus., D.Mus.A., University of Colorado

Fellow of the American Guild of Organists

TERESA R. WUBBENA, Professor of Music, 1976.

B.Mus.Ed., M.A., Sam Houston State University

Note: All faculty and administration listings are as of February 2009.

# FACULTY EMERITI

---

- IDA M. ADOLPHSON, Ed.D., Psychology, 1973-1993
- JACK AUGUSTINE, Ed.D., Health Promotion and Human Performance, 1985-1997
- A. LeVON BALZER, Ph.D., Administration, 1994-2004
- ANDREW C. BOWLING, Ph.D., Biblical Studies, 1969-1999
- M. LISA BRANDOM, Ed.D., English, 1984-2006
- JOHN E. BROWN, JR., LL.D., Administration, 1943, 1946-1987
- WILLIAM H. BURNSIDE, Ph.D., History, 1969-1990
- G. ROBERT BURNS, Ed.D., Health and Sport, 1975-2006
- GLENNA BELLE DAVIS, Ed.D., Health Promotion and Human Performance, 1964-1994
- KENT DAVIS, Ph.D., Construction Management, 1969-1975, 1977-2004
- MICHAEL T. FLYNN, M.A., Broadcasting, 1977-1999
- MEL R. FRATZKE, Ph.D., Administration, 1997-2001
- KENNETH W. FRENCH, Ph.D., Mechanical Engineering, 1971-2009
- H. GASTON GRIGGS, Ph.D., Biology, 1974-1996
- ROBERT R. GUSTAVSON, Ph.D., Kinesiology, Head Soccer Coach, 1980-2009
- R. JAMES HOLLIDAY, Ph.D., Chemistry and Physics, 1970-2008
- ROGER G. IDDINGS, Ph.D., Education, 1988-1999
- PAUL G. KIMBALL, M.B.A., Business, 1981-1999
- FRED P. LOLLAR, M.A., Journalism, 1984-1992
- ARNOLD C. MAYER, M.Ed., Communication and Adult Education, 1989-2007

JOHN BROWN UNIVERSITY

- LEE T. NETHERTON, Ph.D., Chemistry, 1969-2005
- EDWARD L. NICHOLS, Ed.D., English, 1960-1996
- RICHARD L. NISWONGER, Ph.D., History and Biblical Studies,  
1964-1969, 1970-1997
- LARRY O'KELLEY, M.A., Sociology, 1967-1994
- JAMES V. PEARSON, Ph.D., Engineering, 1959-1962, 1963-2002
- N. EDWARD RENFROW, Ed.D., Health and Sport, 1981-2004
- LINDA G. ROMIG, Ed.D., Education, 1985-2007
- RICHARD L. RUBLE, Ph.D., Th.D., Biblical Studies, Psychology,  
and Administration, 1964-1999
- LARRY G. SEWARD, Ed.D., Biology, 1970-2007
- JOHN E. SHEEHY, M.A., Men's Basketball Coach, 1989-2007
- MARION SNIDER, B.S., Administration, 1940-1985
- SHIRLEY FORBES THOMAS, Ph.D., English, Honors, and  
Administration, 1969-2001
- JAMES C. WALTERS, D.Min., Biblical Studies, 1968-2003
- GILBERT B. WEAVER, Th.D., Biblical Studies, 1960-1969,  
1972-1999
- CHARLES D. WILLIS, B.Arch., Building Construction, 1946-1986
- HELEN B. WILMOTH, Ed.D., Home Economics, 1967-1985
- JOE M. ZIMMERMAN, Ph.D., Music, 1956-1960, 1961-1966,  
1967-1969, 1971-1996

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