Located on a hilltop overlooking Charlotte’s impressive skyline of high rise office buildings, hotels, and gleaming towers, Johnson C. Smith University is nestled in West Charlotte with easy access to I-77 and I-85. The campus maintains a pastoral setting on 100 acres with an architectural mix of Gothic (Biddle Hall, a historical landmark) to contemporary (such as Duke Library) buildings.

Founded in 1867, Johnson C. Smith University is an independent, private, co-educational institution of higher education dedicated to providing an outstanding education for a diverse group of talented and highly motivated students from various ethnic, socioeconomic, and geographical backgrounds. The University offers a liberal education in conjunction with concentrated study in specialized fields in preparation for advanced study and specific careers.

The University student population is more than 1600 with students from a majority of the fifty states and from several foreign countries. The University has an active exchange program with universities in Australia, Japan, and Russia.

Johnson C. Smith University’s faculty includes distinguished graduates of many of the nation’s finest academic institutions. Over 81% of our full-time instructional faculty have doctorate or terminal degrees. The current student-teacher ratio is 14:1. An institution where effective teaching is considered paramount, the University provides opportunities for individualized student development.

The University offers 28 majors in the Humanities, Social Sciences, Business, Education, Mathematics, Computer Science, and Natural Sciences leading to the Bachelor of Arts, Bachelor of Science, and Bachelor of Social Work degrees. Students may minor in most areas where majors are offered, as well as in Pre-Law, Sociology, and African-American Studies. Students may also complete courses in military science, as part of either the Army or Air Force ROTC programs.

The University’s administration and faculty remain sensitive to the changing needs of society for well-prepared graduates. Courses are monitored and evaluated for currency of content. Faculty also are provided opportunities to constantly update both their skills and knowledge base through the University’s nationally recognized Faculty Development Program and other avenues.

Johnson C. Smith University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; Telephone number 404-679-4501) to award the B.A., B.S., and B.S.W. degrees. The University’s Department of Education is nationally accredited by the National Council for Accreditation of Teacher Education (NCATE); its Department of Business is accredited by the Association of Collegiate Business Schools and Programs and its Department of Social Work is accredited by the Council on Social Work Education.
**POLICIES and PROCEDURES**

**Admissions**

The Johnson C. Smith University Summer School is open to all persons who meet eligibility requirements in at least one of the following categories:

- Persons desiring to take college courses for self-improvement
- Students completing requirements for degrees at other colleges (Statements of approval from a designated official at the students home institution must be presented if credit is to be transferred)
- Students completing requirements for degrees at Johnson C. Smith
- High school graduates intending to pursue a degree at Johnson C. Smith or another institution (Statement documenting graduation from high school or approval to attend the University's summer session from the dean or registrar of the college or university at which the student has been accepted for the fall semester must be provided PRIOR to enrollment)
- Veterans eligible under Public Law No. 91-219 of the Congress of the United States to take training in an approved institution (Johnson C. Smith is certified by the Veterans Administration to provide training)

**Tuition and Fees**

Tuition for a course load up to nine (9) credit hours is $177 per credit hour. An additional charge of $177 per credit hour will be made for any hours that exceed the normal load. Online fee of $125.00 will be charged for each course. Students who wish to take more than the normal load of nine credit hours must consult the Director of Summer School.

Tuition $ 177.00 (per credit hour)
Mandatory Fees
  Activity Fee $46.00
  Computer Lab Fee $114.00
  Online Fee $ 125.00

Insurance Fee $ 50.00 (not enrolled Spring 2013)
Room Charge $462.00
Board Charge $439.00 (only one meal plan)
Late Registration Fee $10.00

All fees are due and payable on the day of registration. Fees are not refundable after the first week. No exception to this regulation will be made for illness or any other reason for withdrawal. No refund will be made to students dismissed for academic or disciplinary reasons.

A late registration fee of $10.00* will be charged after the first day of each session. NOTE: Late registration fees for veterans will not be paid by the Veterans’ Administration. The veteran is personally responsible for late registration fees, payable in advance.

**Housing and Board**

**Summer Session**

Housing in University residential halls and board during the summer is available for full-time students (enrolled in six or more credit hours), per the fee scale above. The fee for room and board will cover room rent and three meals per day. A deposit may be required.

Students must apply for summer school housing through the Residence Life Office either in person or by requesting a Housing Application & Agreement form from the:

Residence Life Office
100 Beatties Ford Road
Charlotte, NC 28216
(704) 378-1099

All completed applications and agreements should be submitted to the Office by May 23, 2012.

*Fee is subject to change
Grading

The grading scale for all courses offered during the summer is A, B, C, D, F, I (Incomplete) and W (Withdrawal—for official withdrawals only).

- A 90-100
- B 80-89
- C 70-79
- D 60-69
- F Below 60

Grades will be given in all courses which a student has enrolled. Students should avoid enrolling in courses already completed except in cases where an unsatisfactory grade was earned in the course. Johnson C. Smith students are reminded that if a student is unable to complete a course due to sickness or other unavoidable cause, they may be given a grade of I (Incomplete) if the successful completion of the work will enable the student to earn a passing grade. The incomplete may be removed while the student is not enrolled, but it must be removed within six weeks after the beginning of the next term in which the student is enrolled. If a student does not enroll within two years after receiving the I, the incomplete becomes a grade of Z, a permanent I. When the work is completed within the deadline, the student is responsible for securing the necessary Removal of Incomplete form from the Registrar’s Office, taking it to the Office of Financial Affairs to pay the necessary fee for removing incompletes, and then submitting the form to the instructor, who will then report the final grade to the Registrar.

Class Attendance

Online class attendance is required for all JCSU students. Each student is allowed as many hours of absence per term as credit hour(s) received (not to exceed 4) for the class. This policy does not apply to internships and student teaching. Attendance policies for these classes will be determined by the offering department. A student is expected to attend all classes and not be absent without adequate cause. It is the responsibility of the student to make up scheduled work missed because of class absences. Absence from unannounced tests and other assignments may be made up at the discretion of the instructor. Students who exceed the maximum number of absences may receive a failing grade for the course.

Instructors are expected to explain the attendance requirements at the beginning of the term and to include requirements in the course syllabus issued to students. Instructors are required to maintain accurate attendance records on all students and, if requested, to report to the Dean of Summer School any student who exceeds the maximum number of absences.

Honor Code Policy

The following University approved Honor Code is enforced by the Office of Academic Affairs and the University Judiciary Board:

"I pledge that this work is my own and I will not cheat, or represent the words, ideas, or projects of others as my own. I further pledge that I will not engage in academic dishonesty, which includes lying, stealing or assisting others in misrepresenting their work. As a member of the student body of Johnson C. Smith University, I also pledge to report all violations of the Honor Code that I observe in others. I understand that violations of the Honor Code are subject to disciplinary procedures by the University."
Withdrawal and Refund Policy

The last day to withdraw from the summer session, which begins on May 28, is June 7th.

Students who wish to drop or change courses during the summer session may do so within the guidelines provided.

Student Health Services
Summer Session

The Health Center, located in the University Memorial Union building, provides routine medical health care for the treatment of minor injuries and illnesses. Health education and medical care are provided. Each student is required to submit a complete physical examination and immunization record before registration, including former JCSU students who have not been enrolled for a period of one year or more (the appropriate form may be requested from Health Services, upon admission approval, at the University’s address).

Student accident and sickness insurance is provided as part of the student health care program. All students are enrolled in the insurance program at a nominal cost, paid at the time of registration. The insurance provided is a supplement to the student’s family insurance plan and is not intended to be comprehensive or to replace the family’s responsibility for the student’s health care.

Student Disability Policy
Summer Session

Johnson C. Smith University is committed to providing equal opportunities to all students and assisting students in making their college experiences successful and positive. It is the policy of the University to provide equal access and reasonable accommodations for its students with disabilities participating in, attending, or benefiting from University-sponsored programs and activities.

Student Support Services serves the special needs of students with disabilities. Individuals requesting services should provide documentation of their disability from their physician or other professional.

Repeating Courses

No student will receive credit for the same course twice. If any course is repeated in which credit hours are earned, the student’s permanent record will be adjusted by subtracting the hours of the lower grade from the total hours earned. Credit hours will then be recorded for only the higher grade. Students are responsible for notifying the Registrar’s Office when a course is being repeated; space on the registration form is provided for this notification. Courses in which JCSU students have earned the grade of F may only be repeated at Johnson C. Smith University.

Vehicle Registration Policy
Summer Session I only

All vehicles not previously registered on the Johnson C. Smith University campus must be registered with the Campus Police Office on the first day of registration. Vehicle registration fees are NOT refundable. Vehicle registration for the summer term is $15.00. Vehicles registered with the Campus Police Office during Spring 2013 DO NOT have to register again for the Summer 2013 session.
REGISTRATION

Registration and Classes
Summer School Students may check into residence halls on Thursday, May 23, 2013. Registration and Validation for Summer School will be from 9:00 a.m. to 4:00 p.m. on May 24, 2013. Johnson C. Smith University students who completed the advance registration process for summer school (April 29—May 1, 2013) must validate by May 24th in order to retain spaces in courses for which they pre-registered.

Classes begin May 28th – July 2nd The LAST DAY TO ADD/DROP a class (with Tuition Adjustment) for this session is June 4, 2013. The LAST DAY TO DROP a class (No Tuition Adjustment) is June 7, 2013.

Final Examinations
All students are required to take the final examination in each course for which he/she is officially enrolled. The final examination can not account for more than twenty-five percent (25%) of the final grade. Failure to take an examination does not guarantee a grade of I. Students who do not fulfill their financial obligations will not be allowed to take the final examinations at the end of the session.

Academic Calendar
Summer School Registration and Validation begins February 25, 2013 - May 31, 2013
JCSU Students will meet with their advisors for advising and registration.

Non-JCSU Students - For Application Information, contact the Admissions Office at 704 378-1010 and for additional Summer School questions, contact Ms. Renea Killian at rkillian@jcsu.edu or 704 378-1015.

Thursday, May 23
Summer School Students check into Residence Halls (9:00 am - 5:00 pm)

Monday, May 27
MEMORIAL DAY HOLIDAY (University Closed)

Tuesday, May 28
Summer School Classes Begin

Friday, May 31
Last Day to Add a Course

Tuesday, June 4
Last Day to Drop a Course (with Tuition Adjustment)

Friday, June 7
Last Day to Drop/Withdraw (No Tuition Adjustment)

Monday/Tuesday, July 1-July 2
FINAL EXAMINATIONS for Summer 2013

Tuesday, July 2
Last Day of Classes
Residence Hall Closed (5:00 p.m.)

Wednesday, July 3
Final Summer School Grades are Due in the Registrar’s Office by (12:00 pm)
May 23 - July 2, 2013

Students may take up to nine (9) credit hours during the summer session.

Unless otherwise indicated, classes meet daily Monday through Thursday. Science lecture and laboratory courses meet as indicated in the course schedule listing.

The University reserves the right to cancel courses in the summer session for which there is insufficient registration, to modify any course, or to change the instructor for any course indicated in this bulletin. There will be no partial refund of any fees as a result of course cancellations unless the student decides to continue as a part-time student. Semester credit hour designation for each course appears beside the course descriptive name, inside the parentheses.

Accounting
ACC 235 Intro to Financial Accounting (3) This course introduces accounting as an information system. The primary focus is on for-profit organizations and the measurement, processing, and communication of financial information for users external to the organizations. Emphasis is placed on recording and reporting financial activities following Generally Accepted Accounting Principles (GAAP). Prerequisite: MTH 132.

Biology
BIO 240 Human Anatomy & Physiology (4) A study of the basic structure and functions of man, both descriptive and experimental. Prerequisite: BIO 142 or equivalent. Fulfills requirements for the physical education major and the social work major (includes Lab).

BIO 143 Introduction to Biology I (4) An introduction to the biological sciences. Major concepts covered include the nature of scientific inquiry, cell biology, animal and plant physiology, genetics and energetics, with a focus on the basic characteristics of living things. Lecture: 3 hours per week. Laboratory: 3 hours per week.

BIO 144 Introduction to Biology II (4) A continuation of BIO 143. Major concepts covered include taxonomy, ecology, biodiversity and evolution with a focus on the interactions between organisms and their environment. Prerequisite: BIO 143. Lecture: 3 hours per week. Laboratory: 3 hours per week.

BIO 422 Laboratory Projects in Biology (2) Laboratory investigation designed to allow the student to become more actively involved in biological research either by participating in faculty designed projects or by pursuing individual interests approved by the Department Chair. Progress reports, discussions, and presentation of results are required. Credit for this course can also be earned by outside research in industry, government, or academic settings. Requires a minimum of 80 hours of work time for two credit hours. May be repeated for credit upon approval of the Department Chair; however a maximum of three hours of BIO 422-430 credit may be applied to the Biology major or minor or General Science major requirements. Cross listed as CHE 422. Prerequisite: approval by Department Chair.

BIO 430 Research Problems in Biology (3) Independent or team work in laboratory investigation of some aspect of biology. Progress reports, discussions, and presentation of results are required. Credit for this course can also be earned by outside research in industry, government, or academic settings. Requires a minimum of 120 hours of work time for three credit hours. May be repeated for credit upon approval of the Department Chair; however a maximum of three hours of BIO 422-430 credit may be applied to the Biology major or minor or General Science major requirements. Cross-listed as CHE 430. Prerequisite: approval by Department Chair.

BIO 499 Special Topics in Biology (3) Seminar and/or laboratory courses requiring advance reading in the scientific literature. A current topic selected by the instructor will be the focus for the semester. May be repeated for credit.

Business Administration
BUS 233 Business Statistics (3) Principles of applied business statistics, collection, tabulation, classification, presentation of business and economic data. Prerequisite: MTH 132 or MTH 137.

BUS 234 Quant. Methods in Business (3) An introduction to the process and analytical decision-making tools used in business (service and manufacturing) and economics. Topics include: introduction to operation.
management, linear programming, inventory management, project planning and control (PERT CRP and CPM), forecasting and others. Prerequisites: BUS 233, or permission of instructor.

BUS 335 Legal Environment of the Firm (3) A study of the legal settings of business organization including ethical consideration of managers, shareholders and consumers. Topics covered include torts, contracts, consumer credit, corporations, employer, employee relationships, etc. Prerequisite: ENG 132.

BUS 339 Management Information Systems (3) An overview of various business information systems with special emphasis on information solutions in business problems. The impact of these solutions in various corporate levels will be analyzed. Co-requisites: ACC 236; ECO 232.

Chemistry
CHE 111 General Chemistry Laboratory I (1) Laboratory course to accompany Chemistry 131. Co-requisite: CHE 131 or consent of department. Three hours of lab per week.

CHE 112 General Chemistry Laboratory II (1) Laboratory course to accompany Chemistry 132. Prerequisite: CHE 111 and 131. Co-requisite: CHE 132 or consent of department. Three hours of lab per week.

CHE 131 General Chemistry I (3) A discussion of the fundamental principles of chemistry in relation to the physical and chemical properties of the metallic and nonmetallic elements and their compounds. Prerequisite: Placement in MTH 137 or higher or passing score on departmental placement exam, or approval of department head. Three lectures a week.

CHE 132 General Chemistry II (3) A continuation of Chemistry 131. Prerequisites: CHE 131. Co-requisite: CHE 112 or consent of department. Three lectures a week.

CHE 211 Organic Chemistry Laboratory I (1) Laboratory course to accompany Chemistry 231. An introduction to basic laboratory techniques of organic chemistry plus explorations into organic synthesis, and spectral analysis. Prerequisites: CHE 112 and 132. Co-requisite: CHE 231 or consent of Department. Four hours of lab per week.

CHE 231 Organic Chemistry I (3) A study of the fundamental principles of organic chemistry including reaction mechanisms, functional group reactions and preparations, syntheses of and within both aliphatic and aromatic systems, plus stereochemical and spectroscopic considerations. Prerequisites: CHE 132. Three lectures a week.

CHE 422 Laboratory Projects in Chemistry (2) Laboratory investigation designed to allow the student to become more actively involved in chemical research either by participating in faculty designed projects or by pursuing individual interests approved by the Department Chair. Progress reports, discussions, and presentation of results are required. Credit for this course can also be earned by outside research in industry, government, or academic settings. Requires a minimum of 80 hours of work time for two credit hours. May be repeated for credit upon approval of the Department Chair; however a maximum of three hours of CHE 422-430 credit may be applied to the Chemistry major or minor or General Science major requirements. Cross-listed as BIO 422. Prerequisite: approval by Department Chair.

CHE 430 Research Problems in Chemistry (3) Independent or team work in laboratory investigation of some aspect of chemistry. Progress reports, discussions, and presentation of results are required. Credit for this course can also be earned by outside research in industry, government, or academic settings. Requires a minimum of 120 hours of work time for three credit hours. May be repeated for credit upon approval of the Department Chair; however, a maximum of three hours of CHE 422-430 credit may be applied to the Chemistry major or minor or General Science major requirements. Cross-listed as BIO 430. Prerequisite: approval by Department Chair.

Chinese
CHI 496 Special Topics in Chinese (6) This course provides a detailed investigation of a special topic in Chinese language or literature. The course may be repeated for credit in cases where students take courses in different topics. Prerequisite: A grade of C or better in CHI 232, equivalent placement, or permission of the instructor.
Communication Arts

COM 130 Fundamentals of Speech (3)
Introduction to speech communication as it applies to practical, intrapersonal, interpersonal, small group and public settings. Includes the study and practice of voice and dialect, organization and delivery of formal presentations and critical analysis of speech concepts and techniques. (Formerly Speech 130.)

COM 240 Business Writing (3)
Techniques of writing in business and other organizational contexts, including letters, reports, studies, and publicity materials. Public relations students may be advised to enroll in sections taught by Communication Arts faculty members. (Same as ENG 233)

Computer Engineering

CSE 138 Introduction to Computer Science and Engineering (3)
The course covers a description of a computer system, relationship between software and hardware, software and hardware configuration, and introduction to logic circuits, an introduction to electronic circuits and systems and hands-on lab experience.

CSE 439 Special Topics in Computer Science and Engineering (3)
In this course special topics cover new advances in computer science; computer engineering and information technology will be selected and offered by the department. The theme covered by the course may change from one semester to another. Examples are topics to cover are new networking operating systems, new database packages, artificial intelligence, and telecommunications. Prerequisite: Consent of the department.

CSC 131 Computer in Society (3)
This course provides students with an introduction to computer hardware and software in addition to computer applications such as work processing spreadsheets, database, power point, and multimedia. The course will also introduce students to the World Wide Web and its application.

CSC 230 Introduction to Programming (3) This is an introductory level course in programming using Visual Basic (VB). Prerequisite: MTH 131 or higher.

CSC 231-232 Computer Programming I, II (3)
These two courses include fundamentals of computer program design, flow charts, pseudo codes, and fundamentals of structured and object-oriented programming. Students are taught how to design, code, and execute programs using structured and object-oriented programming languages decided by the Department (C++/Java). The two courses must include the implementation of competitive programming projects.

CSC 233 Introduction to Discrete Structures (3)
The course includes elements of set algebra, partitions and counting techniques. Boolean algebra, graphs, trees, grammars, basic theory of groups, and finite state machines. The course also includes the applications of these structures in computer science. Prerequisite: CSE 138, and MTH 131.

CSC 234 Data Structures and Algorithms (3)
The course includes basic concepts of data, linear lists, arrays and strings, representation of trees and graphs, hashing, sorting and search algorithms. Multi-linked structures, files, and storage allocation and collection. Prerequisite: CSC 232.

Criminology

CRIM 436 Internship in Criminology (3)
Through placement in a criminal justice agency or social service agency, students will put into practice concepts, methods and theories learned in course work. Students will work 120 hours at an agency during a semester. Course may be taken twice. Prerequisite: CRIM 131. Offered every Semester.

Economics

ECO 231 Principles of Economics I (3)
An introductory course in principles and theories of economics. Prerequisite: RHC 192 and Math 132 or Higher.

ECO 232 Principles of Economics II (3)
An introductory course in principles and theories of economics. Prerequisite: RHC 192 and Math 132 or Higher.

English

ENG 131 Composition (3)
A study of composition with an emphasis on the writing process, the coherence and support of arguments, Standard Written English syntax and grammar, information literacy, and critical reading.

ENG 132 Intro to Literature Appreciation(3)
A basic course in literature appreciation with an emphasis on responding critically to features in literary texts through writing. The course culminates in a research paper based on
critical reading that integrates a literary topic and information literacy training with formal MLA documentation. Prerequisite ENG 131.

**ENG 232 Studies in World Literature (3)** An introduction to literature, using poetry, fiction, and drama from around the world (Africa, Asia, Europe, South and North America). Prerequisite: RHC 192/ENG 132.

**ENG 496-497-498 Special Topics in English (1-6)** Detailed investigation of a special topic in language or literature. Prerequisite: ENG 234 or consent of instructor.

**French**

**FRE 131 Elementary French I (3)** An introductory course in the fundamental communicative skills of listening, speaking, reading, and writing. An interactive classroom approach emphasizing the application of language to concrete situations using essential vocabulary and structures as well as an appreciation of French/Francophone culture.

**Health & Human Performance**

**HED 131 Personal Health (2)** A lecture course discussing topics such as preventive health care, nutrition, coping in today's society, decision making, diseases, drugs, love and the human life cycle, etc. This course satisfies the general education requirement for majors and non-majors. *Satisfies Liberal Studies Requirement.

**HED 434 Methods and Materials in Teaching Health Education (3)** This course is designed to provide the student with the opportunity to develop knowledge and competencies in the use of effective methods of teaching health education and the effective use of resources. Best practices as they relate to the National Health Education Standards, the North Carolina Standard Course of Study, and educational technology are also a part of this course. Prerequisite: HED 333. EDU 312 must be taken concurrently.

**HED 437 Applications in Health Communications (3)** A course designed to introduce the student to the many facets of health communication. Understanding of theoretical frameworks in health, health literacy, and levels of communication are explored. Practical experience in design and production of health educational materials utilizing health communication channels is required

**History**

**HIS 436-437 Topics: Modern Islam (3)** Various special topics that permit advanced work in different fields of historical study.

**Liberal Studies**

**LS 130 Identity: African-American and Other Cultural Traditions (3)** The aim of this reading-writing intensive interdisciplinary Freshman Core course is to enable students to examine the process of human identity formation through the study of humanities and social sciences. Students will conduct inquiry into the major development and patterns of change in a variety of cultures, including African American culture, with emphasis on human values, beliefs, and emotions, and how these are expressed through human creations.

**LS 135 Science, Technology and Ethics (3)** An introduction to the basic principles of biological and physical science and its impact on human life. Current issues in science and technology pertaining to the environment and human health will be discussed.

**LS 235 Studies in Society (3)** This interdisciplinary course introduces the modern practices and applications of social, economic, and political theory. These practices and applications build competence in understanding and using institutions that affect social and economic events. Emphasis will be placed on processes and events that affect different cultural groups and societies.

**LS 238 World Civilizations I (3)** This multidisciplinary course through the methodology of history enables students to analyze the social organization, economics, politics, science and technology, literature, art, religion and philosophy of various cultures and civilizations to 1500 C.E. Patterns of interaction between civilizations and the relevance of the past for the present will also be considered. Contributions of Western and non-Western cultures and civilizations will be examined.

**LS 239 World Civilizations II (3)** This multidisciplinary course through the methodology of history enables students to analyze the social organization, economics, politics, science and technology, literature, art, religion and philosophy of various civilizations from 1500 C.E. to the present.

Patterns of interaction between civilizations and the relevance of the past for the present will also be considered. Contributions of Western and non-Western civilizations will be examined.
Management
MGT 333 Principles of Management and Organization Behavior (3) A study of the management process emphasizing an understanding of the functions of management. Extensive coverage will be given to studying the impact of human behavior in managerial effectiveness including individual and group dynamics, motivation, leadership, teamwork, and interpersonal communication. Prerequisite: MTH 131-137.

MGT 334 Human Resource Management (3) A study of human resources management theories, systems, concepts and strategies including employment and retrenchment procedures, training and development, and remuneration. Prerequisite: MGT 333.

Marketing
MKT 331 Principles of Marketing (3) A course designed to show the characteristics, history and functions related to marketing. Emphasis on product definition, promotion, distribution, and pricing. MTH 131-132.

MKT 335 Fundamentals of Selling (3) A course designed to provide the student with a general survey of the various careers in selling and a thorough study of salesmanship and sales management. Prerequisite: MKT 331.

Mathematics
MTH 131 College Algebra (3) This course is designed to provide an investigative approach to college algebra using the computer and graphing calculator as tools. The topics covered include basic concepts of algebra, functions and graphs, polynomials and rational functions, exponential and logarithmic functions, systems of equations and solving systems of equations using matrices, sequences and series. At least one hour per week of computer assisted laboratory instruction is required.

MTH 132 Finite Math (3) Elements of finite mathematical systems for liberal arts and education students. Topics include real numbers, linear equations and straight lines, systems of linear equations and inequalities, matrix algebra, sets and counting concepts of probability and statistics, mathematics of finance. The course relies heavily on computers and graphing calculators to develop intuition, make estimates, verify results, and check reasonableness of answers. Prerequisite: MTH 131.

MTH 136 Introductory Statistics (3) Descriptive and inferential statistics. Frequency distributions, population and samples, measures of central tendencies and variation. Probability, normal, t, and chi distributions. Hypothesis testing, estimations and confidence intervals. Linear regression. Prerequisite: MTH 131 or by placement.

MTH 137 Pre-Calculus I (3) Properties of real numbers, algebraic expressions, factoring, polynomials and rational fractions. Exponents and radicals, linear and quadratic equations, inequalities, progressions. The binomial theorem, polynomials and partial fractions. Matrices, determinant, and linear systems of equations. Exponential, and inverse functions. Prerequisite:

MTH 138 Pre-Calculus II (3) Exponential and logarithmic functions. Inverse relations and functions. Trigonometric functions and identities. Translation and rotation of axis. Conic sections. Complex numbers. Polynomials, combinatorics and mathematical induction. Prerequisite: Mathematics 137 or by placement.

MTH 231 Calculus I (3) Functions and graphs, slope and tangent lines, concepts of limit and continuity. Differentiation and applications in maxima and minima problems, and rates of change. Prerequisite: Mathematics 138 or by placement.

Music
MUS 131 Introduction to Music Literature (3) An introduction to the history and literature of music. General Education course for all students. Satisfies the Humanities Group requirement in the Liberal Studies Program.

Natural Sciences (NSC)
NSC 218-9 Sophomore Seminar I and II (1-2) Students explore career goals, read scientific literature, and learn the basic types of research presentation used in the sciences. Attendance at Natural Sciences Seminars is required. Prerequisite: Eight hours in Biology, Chemistry, or Physics or consent of Department. Cross-listed as CHE 218-9 and BIO 218-9.

NSC 318 Junior Seminar I (1) Students practice writing personal statements, explore career goals, and prepare applications to internships and graduate and professional programs. Prerequisites: Junior standing or consent of Department. This is the first required course for the Senior Investigative Paper sequence. Cross-listed as BIO 318 and CHE 318.
**NSC 319 Junior Seminar II** (1) Review and discussion of literature and resource materials as they pertain to science. Ethical considerations related to research are also discussed. The student selects a Senior Paper topic, researches and writes it, then orally presents a proposal defending the choice. This is the second required course for the Senior Investigative Paper sequence. Prerequisite: NSC 318. Cross-listed as BIO 319 and CHE 319.

**NSC 429 Senior Seminar I** (2) Independent investigation into the selected topic of the Senior Paper. Emphasis is placed on the skills necessary to produce a written paper, typically in the format of a journal article. Attendance at Natural Sciences Seminars is required. Prerequisite: NSC 319 or consent of Department.

**NSC 419 Senior Seminar II** (1) Independent investigation into the selected topic of the Senior Paper. Emphasis is placed on the skills necessary to produce a written paper, typically in the format of a journal article, plus present a seminar on the SIP topic. Attendance at Natural Sciences Seminars is required. This is the final course in the Senior Investigative Paper Sequence. Prerequisite: NSC 429 or consent of Department.

**Physical Education**

**PED 337 Management of Physical Education and Sport Management** (3) This course provides the student with competencies essential to managing and administering physical education and sport and safety programs. This course requires students to complete the American Red Cross Certification Program in First Aid and CPR.

**PED 230 Foundations of Physical Education and Sport Management** (3) This is the first course for students majoring in Physical Education and Sport Management. It is designed to provide the historical, philosophical, sociological, and other foundation areas of physical education and sport. In addition, information concerning career opportunities and professional growth is presented. A practical experience in an area of interest with a minimum of ten hours of observation at an outside agency and/or public school is required. (Formerly PED 221, PED 229, & PED 331).

**Physics**

**PHY 242 General Physics** (4) A continuation of physics 241. This course offers an introduction to the fundamental principles of physics in relation to electricity, magnetism, light, optics and modern physics. Three lecture hours and three hours of laboratory a week. Prerequisite: A grade of C or higher in PHY241 or consent of the Department.

**PHY 244 Electricity and Magnetism** (4) A continuation of physics 243. This course offers an introduction to the physics of electricity and magnetism, including electric fields, electric currents, circuits, magnetic fields, Maxwell’s equations, and electromagnetic waves. Three lecture hours and three hours of laboratory a week. Prerequisite: A grade of C or higher in PHY243 and Math 232 or consent of the Department.

**Political Science**

**POL 131 American Government** (3) A study of the development, structure, and operation of the American political system.

**Psychology**

**PSY 237 Psychology of Adolescence** (3) The psychology of behavior arising from the problems peculiar to the transitional period between childhood and maturity. Prerequisite: PSY 131.

**Social Work**

**SWK 239 Introduction to Social Work** (3) A survey course that provides a general knowledge of social work as a profession and its many areas of professional practice.

**Sociology**

**SOC 131 Principles of Sociology** (3) An introduction to the viewpoints, basic concepts, and methods of sociology.

**Spanish**

**SPA 131 Elementary Spanish I** (3) An introductory course in the fundamental communicative skills of listening, speaking reading, and writing. An interactive classroom approach emphasizing the application of language to concrete situations using essential vocabulary and structures as well as an appreciation of Hispanic culture.

**SPA 132 Elementary Spanish II** (3) A continuation of Spanish 131 in an ever-increasing interactive classroom environment with emphasis on expansion of vocabulary and grammatical concepts as well as exposure to the concrete reality of culturally diverse attitudes and behaviors. Prerequisite SPA 131.
Sports Management

SPM 331 Sport Marketing (3) This course will provide students with basic and fundamental principles, practices and procedures used in the comprehension, analysis, synthesis, and evaluation of sport marketing theory and techniques as they apply to the specific needs of the sport industry. (Formerly PED 331)

SPM 333 Sport Facilities Management (3) This course discusses functions of management viewed in terms of types of facilities and the kinds of sports staged. Included are coliseums, municipal and college stadiums, country clubs and resorts, YMCAs/YWCAs, and athletic clubs. Detailed, practical background on the principles and practices of public assembly facility management and event promotion is also provided. Formerly PED 333. Prerequisite: PED 230.

SPM 334 Sport Finance and Economics (3) This course provides students with the traditional and innovative revenue acquisition and generation methods and techniques available to the sports practitioner and sport organizations. Moreover, the course provides the student with sport economic principles and theories necessary to make pragmatic and critical decisions. In addition to explorations of conventional income sources, such as tax support, ticket sales, concessions, and fund raising strategies, tactics, and procedures, students receive instruction in more recent innovations related to sport financing. (Formerly PED 334) Prerequisite: PED 230.

SPM 435 Sport Sociology and Ethics (3) This course offers an introduction to the sociological and ethical issues prevalent in the sport industry. The values of sport and the bases for ethical decision-making and moral significance will be sport context. discussed. Students will also gain an understanding of the philosophical and ethical background of the sport context. Prerequisite: PED 230.

Visual and Performing Arts

VPG 230 Basic Design (3) A course designed to acquaint students with the basic skills for design principles of draftsmanship, color scheme, line quality, value scale, perspective, and compositional arrangement. Materials explored in this course include acrylic and water color paints, charcoal, black ink, graphite, and markers. (Formerly ART 130)

VPG 233 Photojournalism I (3) An introduction to the use of the camera as a creative tool with focus on darkroom practices, film developing, and printing. Emphasizes photography as a creative medium for personal expression. A laboratory fee may be required. Prerequisite: VPA 230.

VPS 233 Art Appreciation (3) A survey of styles, themes, and movements in Western art from prehistoric cave painting to developments in the twenty-first century. Formerly ART 231.