

## DIVISIONS OF HIGH SCHOOL AND UNDERGRADUATE ACADEMIC PROGRAMS

The primary mission of the North Carolina School of the Arts is to train young artists for professional careers in the arts. However, from its beginning, the School has had a strong commitment to providing a sound, supporting curriculum of academic studies to ensure the broader education of the artist. Vittorio Giannini, NCSA's founding president, put it this way as he spoke of his plans for the School in 1963:

“It is not enough to be trained as an artist, but as a person. As an artist you will express yourself as a person, and the richer you are as a person the better your expression will be. So, in this framework, you will have academic study.”

The High School and Undergraduate Academic Programs offer young artists, eighth grade through college, the opportunity to broaden their perspective on themselves as individuals and as part of society. The academic curriculum focuses on those areas of the humanities and social and natural sciences that contribute to the general cultural and intellectual awakening of the individual. Particular attention is paid to the design of academic courses relevant to the arts-oriented student.

The size of the School permits, and the philosophy of the Divisions of High School and Undergraduate Academic Programs encourages, individualized attention to the academic needs and dreams of students.

### **High School Diploma Requirements**

#### **Standards of Achievement and Evaluation**

Students must meet the course and credit requirements of the state of North Carolina for the high school diploma. Electives beyond the basic academic requirements for graduation may be chosen from available high school courses if the schedule permits and, for qualified students, college courses. A student meeting the requirements of the North Carolina Academic Scholars Program will be designated as a North Carolina Academic Scholar. For additional information, contact the Division of High School Programs office.

#### **Student Responsibility for Coursework**

In submitting assignments and projects for courses, students take responsibility for their work as a whole, and imply that, except as properly noted, the ideas, words, material and craftsmanship are their own. In written work, if students cite from a source of information or opinion other than themselves without giving credit, either within the body of their texts or in properly noted references and without using quotation marks where needed, or otherwise fail to acknowledge the borrowings, they have in fact presented the work, words or ideas of others as if they were their own. Failure to abide by those simple principles of responsible scholarship is dishonest, as is receiving or giving aid on tests, examinations or other assigned work presumed to be independent or original. A student whose work is found to be dishonestly accomplished and submitted as his or her own for credit will be removed from the course with a grade of “F.”

#### **Competency Testing**

Students also must have passing scores on the North Carolina Competency Tests in Reading and Mathematics and the North Carolina Test of Computer Skills in order to receive a high school diploma from the North Carolina School of the Arts. These tests, which are required by North Carolina law, are given each year. Each student has several opportunities to pass the tests before the scheduled graduation date.

## **Class Attendance**

Regular, prompt class attendance is a personal responsibility. Each high school student is provided with a copy of the Division of High School Programs attendance policy and is responsible for knowing and abiding by the regulations.

New and currently enrolled high school students who have excessive absences during past terms and/or have failed one or more courses in a previous term may be required to participate in an individualized study plan.

## **Total Credits Required for High School Graduation\***

English	4 units
Social Studies	3 units
(1 U.S. History)	
(1 Civics/Economics)	
(1 World History)	
Mathematics	3 units
(Including Algebra I)	
Science	3 units
(1 Physical Science, 1 Biology, 1 Earth/Environmental)	
Health and Physical Education	1 unit
Electives	6 units
(Including arts)	
Total	20 units

\*Total to be accumulated in grades 9-12

## **High School Course Descriptions**

### *English Program*

Development of reading and writing skills, enjoyment and appreciation of literature, and development of taste and critical judgment are the general objectives that guide the design of the program.

#### **ENG 001, 002, 003: Eighth-Grade English**

A course with emphasis on development of grammatical knowledge and writing skills. Students study plays as well as short stories, narrative poetry and novels.

#### **ENG 011, 012, 013: English I: Composition and Literary Forms**

A course concentrating on literature, grammar, and composition. Readings include short fiction, novels, drama and poetry. Students learn research skills and the vocabulary of literary analysis.

#### **ENG 021, 022, 023: English II: World Literature**

A course concentrating on world literature, composition and grammar. The emphasis is on the modes of discourse and a study of selected novels, plays and films.

#### **ENG 027, 028, 029: ESL: Reading/Writing in World Literature**

A one-year high school English course in literature and writing for non-native speakers of English. The course concentrates on analyzing selections from world literature: prose, poetry and drama. Emphasis is also on composition skills and the improvement of English vocabulary, syntax and grammar.

#### **ENG 031, 032, 033: English III: American Literature**

A review of grammar, mechanics and vocabulary as a basis for advanced composition practice in a variety of modes. Along with regular readings and discussions of poetry and prose by American authors, the course introduces students to formal critical analysis of the literary genres.

**ENG 034, 035, 036: English III: Advanced Placement English Language and Composition**

A course that engages students in becoming skilled readers of American prose and poetry written in a variety of periods, disciplines and rhetorical contexts. Students work toward becoming skilled writers who compose for a variety of purposes. Both their writing and their reading make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students can qualify for college credit in many colleges upon satisfactory completion of the College Board Advanced Placement Examination in Language and Composition.

**ENG 041, 042, 043: English IV: Masterworks: Prose, Poetry, and Drama**

A three-term course in which students read and discuss selected literary works from British, European and non-Western authors. Special attention is given to the refinement of skills in written and oral communication.

**ENG 044, 045, 046: English IV: Themes in Literature**

A three-term course in which students will experience a thematic approach to literature with a concentration on the major British works and authors. Focus will be on themes such as innocence and experience, conformity and rebellion, art and literature, and self and society. Emphasis will be placed on composition, and a variety of critical approaches will be used.

**ENG 047, 048, 049: Literature and Film**

This course will explore the intersection of film and literature. In the process, students will be introduced to the history and theory of film by studying some masterworks of cinema. The course will also study how literary texts are translated into film.

**ENG 051, 052, 053: English V: Advanced Placement English Composition and Literature**

A seminar-style course in which advanced students discuss readings from major writers. A wide variety of writing experiences, close readings of poetry and prose passages, and objective testing sessions characterize the weekly procedures. Students can qualify for college credit in many colleges upon satisfactory completion of The College Board Advanced Placement Examination in English Literature and Composition.

*Mathematics Program*

The mathematics program in the secondary school is designed to provide the opportunity for mastery of fundamental principles and basic techniques of mathematics and to offer advanced study in college preparatory courses. Placement testing is required prior to enrollment in any mathematics course.

**MAT 011, 012, 013: Discovering Algebra**

An introductory algebra course designed to prepare students for Algebra I. Topics include: operations with rational numbers, order of operations, and linear equations and functions. Emphasis will be placed on the use of current technology.

**MAT 014, 015, 016: Algebra I**

A one-year, comprehensive algebra course for the accelerated student. Topics of study include linear, quadratic, and exponential functions. Students will use current technology in problem-solving and data analysis. Prerequisite: placement testing or Discovering Algebra.

**MAT 021, 022, 023: Geometry**

A Euclidean geometry course that emphasizes the properties of parallel lines, triangles, polygons and circles. These properties are applied in problem-solving and proof-writing. Prerequisite: Algebra I or Algebra IA and IB.

**MAT 031, 032, 033: Algebra II**

A second-year algebra course that reinforces and extends the topics begun in Algebra I. The course includes the study of linear, exponential, quadratic, logarithmic and polynomial functions. Emphasis will be placed on the use of current technology. Prerequisite: Algebra I or Algebra IA and IB.

*Topics in Advanced Mathematics is a series of one-term courses that can be taken by the term or for one year.*

**MAT 041: Topics in Advanced Mathematics: Quantitative Reasoning**

A one-term course focusing on mathematical reasoning and advanced problem solving. The course will include such topics as the principles of mathematical logic, statistical analysis, using and understanding numbers in context, and mathematical modeling. Prerequisite: Algebra II.

**MAT 042: Topics in Advanced Mathematics: Financial and Scientific Applications**

A one-term course exploring applications of mathematics in the contemporary world. This course will include such topics as financial management, exponential growth and decay, and probability and statistics. Prerequisite: Algebra II.

**MAT 043: Topics in Advanced Mathematics: Mathematics and the Arts**

A one-term course that explores the dynamic connections between advanced mathematics and music, dance, visual arts and literature. The course will examine the relationships between mathematical theory and such topics as the golden mean, Escher-like tessellations and fractals. Prerequisite: Algebra II.

**MAT 044, 045, 046: Advanced Functions and Modeling**

Advanced Functions and Modeling provides students an in-depth study of modeling and applying functions. Home, work, recreation, consumer issues, public policy and scientific investigations are just a few of the areas from which applications will originate. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment.

**MAT 047, 048, 049: Pre-Calculus**

An advanced mathematics course consisting of the study of functions and their applications. The course also includes an intense study of trigonometry. Emphasis is placed on the use of current technology in problem-solving and data analysis. Prerequisite: Algebra II.

**MAT 051, 052, 053: Calculus and Its Applications**

An advanced course that includes the study of limits, the derivative, integration, and applications. Emphasis is placed on the use of current technology in problem-solving and data analysis. Prerequisite: Pre-Calculus or its equivalent.

**MAT 054, 055, 056: Advanced Placement Calculus AB**

A course in single-variable calculus that includes techniques and applications of the derivative, techniques and applications of the definite integral and the Fundamental Theorem of Calculus. Algebraic, graphical, numerical and narrative descriptions are emphasized throughout the course. Emphasis is placed on problem-solving and the use of current technology. Students can qualify for college credit in many colleges upon satisfactory completion of The College Board Advanced Placement Calculus AB exam.

**MAT 057, 058, 059: Statistics**

This course introduces students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will observe patterns and departures from patterns, decide what and how to measure, produce models using probability and simulation, and confirm models. Appropriate technology, from manipulatives to calculators and application software, will be used regularly for instruction and assessment.

*Science Program*

The science program in the secondary school is designed to introduce the student to the fundamental principles and basic techniques of science and to offer advanced study in specific subjects.

**SCI 001, 002, 003: Eighth-Grade Science**

A study of the basic topics, principles, and techniques of the physical and life sciences. Emphasis is on group cooperation and the development of the various skills necessary to gather, record, analyze and summarize observations.

**SCI 011, 012, 013: Environmental Science**

The Environmental Science curriculum focuses on the function of the Earth's systems. Emphasis is placed on Earth as a dynamic, ever-changing system. Students will study matter, energy, crustal dynamics, environmental awareness, materials availability, and the cycles that circulate energy and material through the Earth system.

**SCI 021, 022, 023: Biology**

A study of the basic biological topics, principles and techniques through lecture, group work, class discussion and laboratory. Topics include, but are not limited to, nature, process and history of science; cell biology; molecular basis of heredity; biological evolution; interdependence of organisms; matter, energy, and organization in living systems; behavior of organisms. When appropriate, students also explore the cultural, social, economic and political issues embedded in the biological sciences. This course is offered to students in grades 10 and above. Prerequisite: one unit of High School Environmental or Physical Science.

### **Upper-Level Science Courses**

A year-long course or combination of three one-term courses may be used to fulfill the third-year science graduation requirements if they meet specific course requirements.

#### **Year Courses**

**SCI 031, 032, 033: Chemistry**

A study of the general methods of science using chemistry as a vehicle. Students learn through lecture, discussion and laboratory work, with particular emphasis given to problem-solving techniques.

Prerequisite: Algebra I and one unit of High School Biology.

**SCI 034, 035, 036: Physics**

A conceptual and mathematical approach to the study of matter and energy. Prerequisite: Algebra I and one unit of High School Biology.

**SCI 037, 038, 039: Advanced Biology**

A year-long advanced study of biology as it applies to the young artist. The content includes molecular biology, cell biology, genetics, evolution and organisms. Laboratory activities, data collection and analysis, group projects, and use of educational technologies such as the World Wide Web are an integral part of this course. Prerequisite: one unit of High School Biology and one unit of High School Chemistry or permission of the instructor.

**SCI 041, 042, 043: Advanced Environmental Sciences**

The curriculum focuses on the understanding that science is a process. Students will focus on: (1) Energy conversions underlie all ecological processes; (2) the Earth itself is one interconnected system; (3) humans alter natural systems; (4) environmental problems have cultural and social context; and (5) humans must develop practices that will achieve sustainable systems. Prerequisite: one year of High School Biology.

**SCI 044, 045, 046: Advanced Earth Science**

A year-long, in-depth study for juniors and seniors of planet Earth – its materials and processes. The content includes geology, oceanography, meteorology, and astronomy. Attention is paid to how humans interact with the terrestrial environment.

#### **One-Term Courses**

**SCI 024, 025, 026: Topics in the Biological Sciences**

A course designed for juniors and seniors who wish to continue their study of biology or who wish to complete their diploma requirement in science with a focus in biology. Various topics are selected each school year for three discrete term courses. Possible topics may include North Carolina nature study, biology and culture, human senses, special topics in genetics, and special topics in environmental science. Assignments will include guided library research, careful reading, writing (analysis and reflection) and class discussion. Prerequisite: one unit of High School Biology.

**SCI 027, 028, 029: Conceptual Physics**

A conceptual approach to the study of the basic principles of physics through dance, music and visual arts. Conceptual Physics is intended for juniors and seniors. Prerequisite: one unit of High School Biology.

**SCI 047, 048, 049: Topics in Biology and Social Science**

**SST 047, 048, 049: Topics in Biology and Social Science**

Interdisciplinary seminar for upper-level high school students (11<sup>th</sup>-12<sup>th</sup> grades) which will look through the lenses of biology and culture at selected issues in various contemporary societies. Students will be asked to read, listen, discuss and write critically and thoughtfully. During the year, students and teachers will study the relationship of biology and culture in three areas: human relationships with nature and the environment (fall term); biology and culture (winter term); and human senses and the creative process (spring term). The course may not be repeated for additional credit. Prerequisite: High School Biology. SCI 047, 048, 049 is cross-listed as SST 047, 048, 049.

*Foreign Language Program*

The purpose of the high school French and Spanish programs is to achieve practical use of the language with emphasis on current speech patterns and writing style. The college French, German and Italian courses are open to high school juniors and seniors who meet placement testing requirements and the criteria for admission to a college course and whose schedules accommodate the course.

**FRE 011, 012, 013: French I**

Introduction to the basic sounds and speech patterns of French. Emphasis is on mastery of material studied, including the speaking, writing, reading, and aural-oral comprehension of the language in a culture-oriented atmosphere.

**FRE 021, 022, 023: French II**

Continued study of the language and the culture, including introduction of finer points of grammar, composition, and conversation. Further emphasis is on the four aspects of language learning introduced in French I. Prerequisite: French I; placement testing.

**FRE 031, 032, 033: Advanced French**

An in-depth study of the French language and culture, including advanced grammar structure, authentic French texts, music, videos, and films. The emphasis is on building vocabulary and conversational skills. The course is conducted in French. Prerequisite: French II; placement testing.

**SPA 011, 012, 013: Spanish I**

An introduction to the Spanish language, including speech patterns, grammar, writing, reading, and a diversity of cultural aspects related to Spanish.

**SPA 021, 022, 023: Spanish II**

A comprehensive study of the language and culture of the Spanish-speaking world, with emphasis on grammar, writing and conversation. The course is conducted primarily in Spanish. Prerequisite: Spanish I; placement testing.

**SPA 031, 032, 033: Advanced Spanish**

A course emphasizing meaning and communication, with the opportunity to improve fluency through writing, literary analysis, and the learning and understanding of the Spanish and Latin American culture. The course is conducted in Spanish. Prerequisite: Spanish II; placement testing.

*Social Studies Program*

The social studies program seeks to develop the student's appreciation for history and the social sciences as a foundation for any cultural study. It follows the North Carolina Social Studies Curriculum in presenting a balanced and effective program with focus on Western and non-Western cultures, the American nation, as well as the social sciences. Elective courses may not be offered each year.

**SST 004, 005, 006: Eighth-Grade Social Studies: N.C. History through the 21<sup>st</sup> Century**

A study of N.C. history from the age of European discovery through contemporary times. Using U.S. History as a context, eighth-grade students examine the roles of people, events and issues in North Carolina history.

**SST 011, 012, 013: World History**

An historical approach to the study of human experience throughout the world from ancient to contemporary times will be the core of this survey course. The contributions and patterns of living in civilizations around the world will be examined. This course is offered for students in grade 9.

**SST 021, 022, 023: Civics and Economics**

An introductory course which focuses on the development of economics, legal and political knowledge, and skills needed by all students so that they may become responsible citizens in an interdependent world. This course is offered for students in grade 10.

**SST 031, 032, 033: U.S. History**

A study of U.S. history from the end of the 18<sup>th</sup> century, with special emphasis on the uniqueness of American institutions and their importance in the world today, as well as American artistic contributions. This course is offered for high school students in grades 11 and 12.

**SST 034, 035, 036: World Cultures**

A course designed to enable students to study the diversity and richness of the cultures of the world and to engage them in using the geography, history, arts, literature and artifacts of those cultures as a means of understanding them. Cultural regions, institutions and practices chosen for examination may vary, but those used might include cultures of Africa, Asia, Latin America, the Middle East, and the Commonwealth of Independent States.

**SST 037, 038, 039: Advanced Civics and Economics**

An advanced study of political science and economics, examining basic political, legal and economic institutions and exploring issues facing today's citizens. Students who have completed the 10<sup>th</sup>-grade course may take this advanced course for elective credit. This course is offered for 11<sup>th</sup>- and 12<sup>th</sup>-grade students.

**SST 044, 045, 046: Topics in the Social Sciences**

An introduction to the social sciences (particularly psychology and sociology) as students study various topics that are selected for three distinctive term courses. The student receives one-third unit credit for each term completed, and a different topic is offered each term. Some examples of the kinds of offerings might include: the creative process, the psychology of imagination, and the artist in cultural context. Open to qualified 11<sup>th</sup>- and 12<sup>th</sup>-graders.

**SCI 047, 048, 049: Topics in Biology and Social Science**

**SST 047, 048, 049: Topics in Biology and Social Science**

Interdisciplinary seminar for upper-level high school students (11<sup>th</sup>-12<sup>th</sup> grades) that will look through the lenses of biology and culture at selected issues in various contemporary societies. Students will be asked to read, listen, discuss and write critically and thoughtfully. During the year, students and teachers will study the relationship of biology and culture in three areas: human relationships with nature and the environment (fall term); biology and culture (winter term); human senses and the creative process (spring term). The course may not be repeated for additional credit. Prerequisite: High School Biology. SCI 047,048,049 is cross-listed as SST 047,048,049.

**SST 051, 052, 053: Advanced Placement United States History**

A challenging study of American history from the 16<sup>th</sup> century with special emphasis on the detailed analysis of political, socio-economic, artistic and literary topics. Frequent research and writing assignments, readings of historical materials and scholarly interpretations, and objective testing are all regular components of the class. Students can qualify for college credit in many colleges upon the

satisfactory completion of The College Board Advanced Placement Examination in United States History. Placement will be confirmed by the instructor.

**SST 054, 055, 056: Advanced Placement European History**

A course that will provide a basic narrative of events and movements in European history from the High Renaissance to the recent past. Themes will include intellectual and cultural history, and political and diplomatic history, as well as social and economic history. Students can qualify for college credit in many colleges upon the satisfactory completion of The College Board Advanced Placement Examination in European History. Placement will be confirmed by the instructor.

*Health and Physical Education Program*

The goal of the health and physical education program is to instill in each student a lifelong commitment to individual wellness and fitness and to equip each student with the skills and knowledge to make informed decisions regarding his/her well-being. Age-appropriate health courses are offered; the physical education requirement for junior and senior high school students is met in the case of dance and drama students through their regularly scheduled arts courses. For music and visual arts students, a program is offered by the Division of High School Programs.

**HEA 001, 002, 003: Eighth-Grade Health**

A study of the basic principles of health as they apply to the young student-artist, including such topics as substance abuse, nutrition, interpersonal skills, first aid and safety.

**HEA 011, 012, 013: Health**

An introductory study of physical, mental, emotional and environmental health, including units in substance abuse prevention, human sexuality, interpersonal skills, disease control, and first-aid and emergency care.

**PHE 001, 002, 003: Eighth-Grade Physical Education**

An individually prescribed fitness course designed to meet the needs and interests of the eighth-grade student-artist and to complement the physical dimension of the arts training. Workouts are supervised by trained fitness personnel. Initial and follow-up evaluations are required to assess gains in fitness.

**PHE 011, 012, 013: Physical Education**

An individually prescribed fitness course designed to meet the needs and interests of the high school student-artist and to complement the physical dimension of the arts training. Workouts are supervised by trained fitness personnel. Initial and follow-up evaluations are required to assess gains in fitness.

## **Policy for Admission of High School Students to College Courses**

### **Eligibility**

Only those students who meet the following criteria will be allowed to apply for admission to courses in the Undergraduate Academic Program; approval is not automatic.

Grade level – 11 or 12

Test scores

Grade 11 – PSAT/SAT I or achievement test score required

Grade 12 – PSAT/SAT I/ACT scores required

High school credits

Grade 11 – 12 units completed, including eight required courses

Grade 12 – 13 units completed, including 10 required courses

Grade average in required courses (English, social studies, math, science) — at least a “B,” with no failing grades in these areas.

Acceptable reasons for enrollment include:

- I. Advanced study beyond that which is offered in the high school curriculum.

- II. Elective credit in areas not offered in the high school curriculum.
- III. Early college credit; high school credits completed.

A completed application must be on file in the Undergraduate Academic Programs Office prior to the beginning of the term in which the student seeks enrollment.

### **Available Courses**

Eligible high school students may enroll in one college course per term, if approval is granted and space permits. Courses may be selected from any of the Undergraduate Academic Program offerings except GES 101, 102, 103; GES 211, 212, 213; and courses restricted to specific student groups. The instructor's permission is required for admission to certain advanced-level courses.

### **Course Credit**

High school students have the opportunity to take college courses for which college credit can later be awarded. High school students who later enroll in the North Carolina School of the Arts college program may receive advanced placement credit for college courses completed successfully with a grade of "C" or better when these courses are not part of the basic high school requirements. Those high school students who leave the North Carolina School of the Arts upon completion of their secondary education may submit for transfer credit the college courses taken at NCSA for which a grade of "C" or better was achieved. Final decisions regarding the granting of transfer credit from the School are, as always, made by the receiving institution. In addition to the transcript of all work done at NCSA, a separate letter of explanation regarding the college-level work will be supplied, upon request of the student, to the receiving institution for those high school students who have successfully completed college courses for which they may qualify to receive college credit.

## **College Degree Requirements**

### **Standards of Achievement and Evaluation**

During each term of the academic year, the usual academic program of the college student consists of four semester hours, each course usually carrying two semester hours of credit. The student will thus have earned 12 semester hours at the end of each year. Independent study courses or special seminars may vary from one semester hour to two semester hours of credit depending upon the nature of the course.

#### **Student Responsibility for Coursework**

In submitting assignments and projects for courses, students take responsibility for their work as a whole, and imply that, except as properly noted, the ideas, words, material and craftsmanship are their own. In written work, if students cite from a source of information or opinion other than themselves without giving credit, either within the body of their texts or in properly noted references and without using quotation marks where needed, or otherwise fail to acknowledge the borrowings, they have in fact presented the work, words or ideas of others as if they were their own. Failure to abide by those simple principles of responsible scholarship is dishonest, as is receiving or giving aid on tests, examinations or other assigned work presumed to be independent or original. A student whose work is found to be dishonestly accomplished and submitted as his or her own for credit will be removed from the course with a grade of "F."

#### **Satisfactory Undergraduate Academic Programs Progress Requirements**

Students who have completed half the Undergraduate Academic Programs requirements for their degree must maintain a 2.0 cumulative average and a 2.0 term average each term in General Studies courses. A student who fails to achieve either a 2.0 cumulative or a 2.0 per term average will be placed on General Studies probation for the following term. The student whose cumulative average in academic courses falls below 2.0 for two consecutive terms will be dismissed from the degree program and placed in the Arts Diploma program.

Students who have not completed half the Academic Programs requirements for their degree must maintain a 1.8 cumulative average and a 1.8 term average each term in General Studies courses. A student who fails to achieve either a 1.8 cumulative or a 1.8 term average for a given term will be placed on General Studies probation for the following term. The student whose cumulative average in academic courses falls below 1.8 for three consecutive terms will be dismissed from the degree program and placed in the Arts Diploma program.

When the student's Academic Programs cumulative average improves to the required level, the student may apply to re-enter the baccalaureate degree program.

#### **Transfer Students**

College students who wish to transfer from other institutions of higher education must comply with the School's audition and entrance requirements. College courses carrying a grade of "C" or better may be considered for transfer credit.

#### **Special Students**

The Division of Undergraduate Academic Programs will accept as Special Students only those students who have:

- 1) Finished their Arts Diploma and have returned to NCSA to finish their degree;  
or
- 2) Withdrawn temporarily from their arts program with the special recommendation of their arts dean due to financial, catastrophic, or highly unusual circumstances, and whose GPA in academics is 2.0 or

higher. Those students who have withdrawn from their arts program with a cumulative academic GPA less than 2.0 may not choose this option under any circumstance.

Exceptions to this policy may only be made with the written approval of the associate vice chancellor for undergraduate academic and graduate programs.

### ***Basic Requirements for the Bachelor of Fine Arts and Bachelor of Music***

Qualified college students who wish to pursue a bachelor's degree while receiving professional arts training may enroll in the college degree program. The major portion of the degree student's work is in applied training in the individual arts area; the remaining study toward the degree is classified as non-applied and consists of the following school-wide requirements:

- \* **Clear demonstration of competence in reading, writing, and oral communication skills.**

Writing and oral discussion are stressed throughout the academic program; proficiency in oral communication is particularly encouraged in each of the arts areas.

College-level training in reading, writing, and oral communication is provided in General Studies 101, 102, 103. Entering students who present test scores or high school records that indicate below-average work in English and related subjects are required to take an English Placement Test. Those who perform satisfactorily on the test enroll in General Studies 101; those who do not must also enroll in ENG 100, a non-credit tutorial course stressing reading, writing and study skills. The student's progress will be reevaluated at the end of each term.

#### **General Studies (GES) 101, 102, 103: Critical Perspectives**

The goal of Critical Perspectives is to develop students' powers as critical, creative and active thinkers. Students will achieve this goal by engaging with a variety of works, including NCSA productions, and acquiring familiarity with the major literary genres of poetry, drama, fiction, and non-fiction. Course materials are designed to shed light on ways that artists perceive issues in art, their relationships with their communities, and how their works reflect shifting and evolving social concerns. Throughout this yearlong sequence, emphasis is placed on the students' writing of critical, analytical, argumentative and persuasive essays. The students will explore definitions of art and artists, develop the capacity to analyze works of art, and learn to articulate effective arguments about artistic issues.

#### **GES 101: Critical Perspectives: Art Matters**

Students will be introduced to the basic elements of argumentative and persuasive writing and thinking. They will engage with a variety of art works, develop criteria for evaluating an art work, and write argumentative essays by way of responding to and analyzing art. In addition, work in the library and online will include practice with standard research and documentation methods.

#### **GES 102: Critical Perspectives: Art World**

This course will continue to emphasize the skills needed for college-level writing. Material will be chosen according to a theme or group of themes to explore the relationships between art works and how works interact within and across the boundaries of time, geography and culture. Prerequisite: GES 101 or equivalent.

#### **GES 103: Critical Perspectives: Art Now**

Art created right now at NCSA; current fiction, poetry and drama; films coming out of Hollywood and the studios of independent filmmakers; and popular music and TV shows will be the focus of spring term. Drawing on the work of the previous two terms, students will undertake independent and collaborative projects to express their understanding of their connections to their art and their places in a larger community. Prerequisite: GES 101 or equivalent.

#### **GES 190: Freshman Seminar (2 credits)**

Selected interdisciplinary topics that cross boundaries between performing, visual and moving image arts in the context of liberal arts modes of inquiry, analysis, discussion and evaluation. Attendance at specified NCSA events and performances is required. Intended primarily for first-year college students. May be taken only once for elective credit. Prerequisite: concurrent enrollment in GES 101; completion of GES 101; or the equivalent.

**\* An awareness of major concepts that have shaped the intellectual tradition in the humanities and the arts.**

**GES 211, 212, 213: Foundations of Western Thought**

A three-term course that builds on and extends the close reading, writing, and analytic skills addressed in the Critical Perspectives sequence. The course invites students to develop an informed and critical understanding of some of the major ideas, thinkers and works that have shaped our culture in the past or show promise of making a significant contribution in the future. The primary focus is on the Western intellectual and artistic tradition, but significant attention is also given to texts or ideas of non-Western origin. Prerequisite: GES 101, 102, 103 or permission of instructor.

**GES 211: Religious World Views (2 credits)**

Concerned with concepts about the divine and the human condition as expressed in the Epic of Gilgamesh, Homer, the Bible, Sophocles, writings from the Buddhist tradition, and others.

**GES 212: Self and Society (2 credits)**

Explores various theories about the best form of society and the optimum development of human nature as found in the writings of such thinkers as Plato, Confucius, Machiavelli, Shakespeare, Marx and Engels, Freud, and others.

**GES 213: Concepts of Style (2 credits)**

Examines works of art and ideas derived from the Enlightenment, Romanticism and various strands of Modernism, e.g., "Tartuffe," Goethe's "Faust," "The Rite of Spring," works by T.S. Eliot, Borges, and others.

**\* An informed sense of the individuality of the inter-relatedness of major areas of knowledge, through study in each of the following three areas:**

- Fine Arts/Humanities
- Social/Behavioral Sciences
- Mathematics/Natural Sciences

Each arts area, in cooperation with the Division of Undergraduate Academic Programs, sets more specific, sometimes additional non-applied requirements appropriate to the particular field of study. See the descriptions of degree requirements in each arts area for further information.

**Academic Requirements by Arts School and Concentration**

***DANCE***

Bachelor of Fine Arts (Ballet, Contemporary)

GES 101, 102, 103	Critical Perspectives	6 credit hours
HUM 121, 122, 123	The Arts In Context	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
Foreign Language	French, German or Italian	6 credit hours
SCI 210	Nutrition, Behavior and Culture	2 credit hours
SCI 221, 222, 223	Human Anatomy and Physiology	6 credit hours
SCI 227	The Biology of Movement	3 credit hours
Social Science	elective	2 credit hours

General Studies	electives	8 credit hours
Total academic required credits		45 credit hours

### ***DESIGN AND PRODUCTION***

Bachelor of Fine Arts (Scene Design, Costume Design, Costume Technology, Scene Painting, Stage Properties, Wig and Makeup Design)

GES 101, 102, 103	Critical Perspectives	6 credit hours
ARH 101, 102, 103	Art History	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
THH 241, 242, 243	Theatre History	6 credit hours
LIT 290	Topics in Dramatic Literature	2 credit hours
Math/Science	elective	2 credit hours
Literature/Philosophy	elective	2 credit hours
Social Science	elective	2 credit hours
General Studies	electives	4 credit hours
Total academic required credits		36 credit hours

Bachelor of Fine Arts (Lighting Design, Technical Direction, Stage Management, Sound Design)

GES 101, 102, 103	Critical Perspectives	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
THH 241, 242, 243	Theatre History	6 credit hours
LIT 290	Topics in Dramatic Literature	2 credit hours
Math/Science	elective	2 credit hours
Literature/Philosophy	elective	2 credit hours
Social Science	elective	2 credit hours
General Studies	electives	10 credit hours
Total academic required credits		36 credit hours

### ***DRAMA***

Bachelor of Fine Arts (Acting, Directing)

GES 101, 102, 103	Critical Perspectives	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
THH 241, 242, 243	Theatre History	6 credit hours
LIT 290	Topics in Dramatic Literature	2 credit hours
Math/Science	elective	2 credit hours
Literature/Philosophy	elective	2 credit hours
Social Science	elective	2 credit hours
General Studies	electives	10 credit hours
Total academic required credits		36 credit hours

### ***FILMMAKING***

Bachelor of Fine Arts (Cinematography, Directing, Editing and Sound, Producing, Screenwriting)

GES 101, 102, 103	Critical Perspectives	6 credit hours
ARH 101, 102, 103	Art History	6 credit hours
Or		
HUM 121, 122, 123	The Arts in Context	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
Humanities	elective	2 credit hours
Math/Science	elective	2 credit hours

Social Science	elective	4 credit hours
General Studies	electives	10 credit hours
Total academic required credits		36 credit hours

Bachelor of Fine Arts (Film Production Design)		
GES 101, 102, 103	Critical Perspectives	6 credit hours
ARH 101, 102, 103	Art History	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
Humanities	elective	2 credit hours
Math/Science	elective	2 credit hours
Social Science	elective	4 credit hours
General Studies	electives	10 credit hours
Total academic required credits		36 credit hours

### ***MUSIC***

Bachelor of Music (Instrumental, Composition)		
GES 101, 102, 103	Critical Perspectives	6 credit hours
HUM 121, 122, 123	The Arts in Context	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
Literature/Philosophy	elective	2 credit hours
Math/Science	elective	2 credit hours
Social Science	elective	2 credit hours
General Studies	electives	12 credit hours
Total academic required credits		36 credit hours

Bachelor of Music (Voice)		
GES 101, 102, 103	Critical Perspectives	6 credit hours
ITA 101, 102, 103	Elementary Italian	6 credit hours
GER 101, 102, 103	Elementary German	6 credit hours
FRE 101, 102, 103	Elementary French	6 credit hours
GES 211, 212, 213	Foundations of Western Thought	6 credit hours
Math/Science	elective	2 credit hours
Social Science	elective	2 credit hours
General Studies	elective	2 credit hours
Total academic required credits		36 credit hours

### **College Course Descriptions**

All courses listed may not be offered each year. Lists of courses available in any given year may be obtained from the General Studies office.

General Studies (GES) 101, 102, 103: **Critical Perspectives** (2 credits per term)  
(See previous description)

GES 211, 212, 213: **Foundations of Western Thought** (2 credits per term)  
(See previous description)

#### *Humanities Courses*

Humanities (HUM) 121, 122, 123: **The Arts in Context** (2 credits per term)  
An examination of major historical periods in the Western world and the artistic styles that characterize them, with particular attention to visual arts, music, literature and drama.

HUM 121: **The Ancient and Early Christian Worlds**

HUM 122: **The Medieval and Renaissance Worlds**

HUM 123: **The Modern World**

HUM 290: **Topics in the Humanities** (2 credits)

One-term intensive studies in which the instructor and students are challenged to examine some facet of the Western humanistic tradition. Prerequisite: permission of the instructor.

### *History and Criticism of Art and Theatre*

**Art History** (ARH) 101, 102, 103 (2 credits per term)

A three-term historical survey of the major styles in painting, sculpture, and architecture in Western civilization; non-Western styles as time allows.

ARH 101: **Ancient and Christian**

ARH 102: **Medieval through Renaissance**

ARH 103: **Baroque to Modern**

Theatre History (THH) 241, 242, 243: **Theatre History** (2 credits per term)

THH 241: **Dramatic Theory and Criticism**

This course is designed to explore significant contributions to dramatic theory and criticism from the Greeks to the present. Prerequisite: GES 101, 102, or equivalent.

THH 242: **Design and Performance**

This course is designed to move from the Greeks to the present by focusing on significant contributions to design and performance theory and technique. Prerequisite: GES 101, 102, or equivalent.

THH 243: **Performance Forms**

This course is designed to explore various non-literary performance forms from the ancient to the contemporary. It will include not only European forms, but also present theatrical developments in China, Japan, Africa and Indonesia. Prerequisite: GES 101, 102, or equivalent.

### *English Courses*

English (ESL) 100: **Academic English for Non-Native Speakers** (No credit)

Offered only to non-native speakers of English, this course concentrates on improving academic skills. Particular emphasis is given to practicing college-level reading and writing.

ENG 100: **Learning and Academic Skills Laboratory** (No credit)

A course designed to assist students in improving learning skills through application of the basic principles of learning, and in overcoming deficiencies in analysis, reading and writing.

### *Literature Courses*

The single-term elective literature courses extend the critical thinking, reading and writing skills developed in the prerequisite Critical Perspectives courses (GES 101, 102, 103). The literature courses also extend students' familiarity with the topics, themes and ideas that emerge from the required Foundations of Western Thought courses (GES 211, 212, 213). Literature courses are offered to enhance areas of the programs of the five arts schools, to respond to student interest in timely material, and to take advantage of faculty research and expertise. Individual courses are repeated on average no more often than every three years so that students have access to a fresh variety of course offerings each term they are enrolled. The literature courses are designated by one of the following course titles:

Literature (LIT) 104: **Introduction to World Literature** (2 credits)

A study of literature from a variety of world traditions. Topics alternate between introduction to world literary traditions and introduction to world folktales. The course focuses on the development of skills in text analysis, writing and discussion. Offered to first-year students who have completed GES 101.

**LIT 220: Literature in English (2 credits)**

The study of a variety of texts from American, British and other literatures written in English. Each course focuses on the work of a writer, group of writers, region, period, style, genre or theme. Representative titles from courses offered in recent years: Romantic Art, Romantic Lives; Contemporary Popular Fiction; Chaucer's "Canterbury Tales"; Recent American Poetry; and Women Writers of the Harlem Renaissance. Prerequisite: GES 101, 102, 103 or equivalent.

**LIT 230: Literature in Translation (2 credits)**

The study of a variety of texts from world literature translated into English. Each course focuses on the work of a writer, group of writers, region, period, style, genre or theme. Representative titles from courses offered in recent years: Women in the Ancient World; Italo Calvino, Storyteller; French and German Fairy Tales; and Classical Lyric Poetry. Prerequisite: GES 101, 102, 103 or equivalent.

**LIT 240: Comparative Literature (2 credits)**

The study of a variety of texts from world literature translated into English. Course topics are selected for correspondence of themes, subjects, forms, styles or critical issues regardless of boundaries of nation or language. Representative titles from courses offered in recent years: Narratives of Madness; Don Juan; and Fantasy Literature. Prerequisite: GES 101, 102, 103 or equivalent.

**LIT 290: Topics in Dramatic Literature (2 credits)**

A series of courses that focus on the work of individual playwrights or groups of playwrights, or on dramatic works representing various periods, nations, styles or themes. Representative titles from courses offered in recent years: Ibsen & Shaw; Epic Theatre; Theatre of the Absurd; Tragedy in Athens; The Blood Tragedies, Shakespeare & the Other; and Postmodern Drama. Prerequisite: GES 101, 102, 103 or equivalent.

*Writing Courses*

The single-term elective writing courses provide opportunities for students who write correctly and fluently to extend their skills at creative or professional writing in directions of particular interest. Literary and journalistic texts may be assigned, primarily as models for writing. The work of these courses is accomplished by frequent critiqued and graded assignments, presented in class. A high value is placed on student participation and peer discussion of in-progress and completed assignments. Instruction is given in appropriate and effective techniques for peer critique and for revision. The writing courses are designated by one of the following course titles:

**Writing (WRI) 150: Introduction to Creative Writing (2 credits per term)**

A first course in creative writing or personal narrative. The course focuses on the development of skills for effective use and understanding of language choices in writing. Topics alternate between introductory creative writing and personal narrative: letters, journals, memoirs. Offered to first-year students who have completed GES 101. Prerequisite: completion of GES 101.

**WRI 250: Topics in Practical and Professional Writing (2 credits per term)**

Representative course topics: arts reviewing and criticism, and the art of the interview. Prerequisite: GES 101, 102, 103 or the equivalent.

**WRI 260: Topics in Creative Writing (2 credits per term)**

Representative course topics: fiction writing, poetry writing, dramatic writing, writing adaptations, and writing for solo performance. Prerequisite: GES 101, 102, 103 or the equivalent.

**WRI 360: Advanced Topics in Writing (2 credits per term)**

Greater student initiative and independence is expected than for WRI 250 and 260. Representative course topics: fiction, poetry or dramatic writing. Prerequisite: GES 101, 102, 103 plus WRI 250 or 260 and permission of instructor.

### *Modern Foreign Languages*

French (FRE) 101, 102, 103: **Elementary French** (2 credits per term)

An introduction to the French language with the goal of oral proficiency. The major emphasis is on spoken French, basic grammar and vocabulary building, which will provide the student with necessary language skills to function on a basic level in a French-speaking country. The student will also learn about cultural elements of the country and its people. Prerequisite for FRE 102: FRE 101 or permission of instructor. Prerequisite for FRE 103: FRE 102 or permission of instructor.

FRE 201, 202, 203: **Intermediate French** (2 credits per term)

Continuation of structural skills and vocabulary as needed for expanded understanding and production of the French language. Reading of contemporary literature, which will help familiarize the student not only with the everyday language, but also with current issues and the way French people feel, think and act. Prerequisite: FRE 101, 102, 103 or equivalent.

Note: Advanced-level tutorials are available in French conversation, literature or culture, tailored to the interests of the individual student. By permission of the instructor.

German (GER) 101, 102, 103: **Elementary German** (2 credits per term)

An introduction to the German language with the goal of oral proficiency. The major emphasis is on spoken German, basic grammar and vocabulary building, which will provide the student with necessary language skills to function on a basic level in a German-speaking country. The student will also learn about cultural elements of the country and its people. Prerequisite for GER 102: GER 101 or permission of instructor. Prerequisite for GER 103: GER 102 or permission of instructor.

GER 201, 202, 203: **Intermediate German** (2 credits per term)

Continuation of structural skills and vocabulary as needed for expanded understanding and production of the German language. Reading of contemporary literature, which helps familiarize the student not only with the everyday language, but also with current issues and the way German people feel, think and act. Prerequisite: GER 101, 102, 103 or equivalent.

Note: Advanced-level tutorials are available in German conversation, literature or culture, tailored to the interests of the individual student. By permission of the instructor.

Italian (ITA) 101, 102, 103: **Elementary Italian** (2 credits per term)

An introduction to Italian, with the goal of oral proficiency. Attention is given to pronunciation, conversation skills, basic grammar, and the culture from which the language derives. Prerequisite for ITA 102: ITA 101 or permission of instructor. Prerequisite for ITA 103: ITA 102 or permission of instructor.

ITA 201, 202, 203: **Intermediate Italian** (2 credits per term)

Continuation of structural skills and vocabulary as needed for expanded understanding and production of the Italian language. Reading of current literature and additional cultural materials that will help familiarize the student with the language and concerns of contemporary Italy. Prerequisite: ITA 101, 102, 103 or equivalent.

Note: Advanced-level tutorials are available in Italian conversation, literature or culture, tailored to the interests of the individual student. By permission of the instructor.

### *Philosophy*

The single-term elective philosophy courses utilize the reading, writing and analytic skills developed in the Critical Perspectives courses (GES 101, 102, 103) to begin further exploration of ideas examined in the Foundations of Western Thought courses (GES 211, 212, 213) or to investigate alternative intellectual options. The electives presented during any given year are taken from either the history of philosophy or topics in philosophy offerings.

Philosophy (PHI) 101 **Introduction to Philosophy** (2 credits)

An introduction to some central philosophical debates about the nature of the self, the constitution of ultimate reality, and the foundation of value.

**PHI 211: Readings in Ancient Philosophy (2 credits)**

An examination of the birth of philosophical thought in the West, culminating in the work of Plato and Aristotle. Attention is given to non-Western thinkers and traditions. Prerequisite: GES 101 or permission of instructor.

**PHI 212: Readings in Medieval Philosophy (2 credits)**

Investigations of some of the major philosophical traditions of the Middle Ages, with some attention given to the cultural and social context of the philosophers to be studied. Prerequisite: GES 101 or permission of instructor.

**PHI 213: Readings in Modern Philosophy (2 credits)**

A study of some of the representative thinkers in the period from Descartes to the present. Prerequisite: GES 101 or permission of instructor.

**PHI 214: Readings in Contemporary Philosophy (2 credits)**

A study of contemporary thinkers representative of current important trends in philosophical thought. Prerequisite: GES 101 or permission of instructor.

**PHI 224: Metaphysics and Mysticism (2 credits)**

Various perspectives on what is ultimately real and how it can be known. Readings and authors studied will vary but usually include Plato, Descartes, Berkeley and representatives of Daoism, among others. Prerequisite: GES 101 or permission of instructor.

**PHI 225: Moral and Political Philosophy (2 credits)**

What are a good life and a good society? What is right and wrong? Why be moral? These and similar questions provide the points of departure for this course. Prerequisite: GES 101 or permission of instructor.

**PHI 226: Philosophy of Religion (2 credits)**

An examination of Western and non-Western religious ideas, with a large segment of the course given to problems concerning the nature of religious knowledge, the nature and existence of God, and the problem of evil. Prerequisite: GES 101 or permission of instructor.

**PHI 227: Philosophy of Art (2 credits)**

An examination of classical and contemporary theories of the nature of art and artistry. Prerequisite: GES 211 and 212.

**PHI 290: Special Topics in Philosophy (2 credits)**

In-depth examinations of particular thinkers, movements or philosophical problems. Prerequisite: GES 101 or permission of instructor.

*Social Sciences*

Social Science (SOS) 124, 125, 226: **American Cultural Studies (2 credits per term)** (Offered as needed.)

SOS 124: A survey of American culture and society from 1776 through the Civil War era, with emphasis on the development of distinctively American ideas, institutions and art.

SOS 125: A topical survey of American culture from 1880 to the present, with emphasis on what happens to American ideas, institutions and arts as the United States becomes an industrial and urban world power.

SOS 226: Specialized topics focusing on one facet of American culture. A different topic is chosen each term. Examples have included the American political tradition, the American South, democracy in America. Prerequisite: GES 101, 102, 103 or equivalent.

**SOS 154: Archaeology and Human Evolution (2 credits)**

A survey of the origins of ourselves and our cultures since human beings appeared on Earth. The biological and environmental forces that influenced the ways our ancestors lived are reviewed. Methods by which this information has been learned and likely directions for our future as a species will be considered.

**SOS 155: Cultural Anthropology (2 credits)**

A consideration of the interrelated parts of cultures, reasons for their creation, and why and how they change. The course also examines the functions of a culture's major symbolic systems, with special attention to the arts.

**SOS 156: World Cultures (2 credits)**

An exploration of human cultures in one of the following regions: Africa, Asia, North or South America, Europe, or the Pacific, to reveal common and unique features in lifestyles from each region. The cultures are placed in an ecological and evolutionary framework. Regional focus rotates; subjects vary each term and year. Prerequisite: GES 101, 102, 103; SOS 155 recommended.

**SOS 236: European Cultural Studies (2 credits per term) (Offered as needed.)**

Special topics (a focus on one facet of European culture; a different topic is chosen each year). Prerequisite: GES 101, 102, 103 or equivalent.

**SOS 244, 245, 246: Contemporary World Issues (2 credits per term) (Offered as needed.)**

An examination of contemporary issues of global, national and individual importance.

**SOS 244: Global Perspectives (2 credits)**

An examination of major contemporary and world problems including population and food supply, war, the impact of technology, and the role of modern science. Prerequisite: GES 101, 102, 103 or equivalent.

**SOS 245: The Western World in the Contemporary Age (2 credits)**

An examination of the major national and international problems of the Western industrial nations, with emphasis on domestic political issues, economic trends and social issues. Prerequisite: GES 101, 102, 103 or equivalent.

**SOS 246: The Non-Western World in the Contemporary Age (2 credits)**

Problems of the Third-World countries. The course will include a broad treatment of non-Western cultures as well as a special focus each year on a single non-Western culture. Prerequisite: GES 101, 102, 103 or equivalent.

**SOS 290: Contemporary Issues in Anthropology (2 credits)**

A special topics course in which specific material may be changed according to class interest, but which will deal with an area of concern in anthropology and the other social sciences today. Prerequisite: GES 101, 102, 103 or equivalent.

*Mathematics and Science*

A student wishing to fulfill the all-school science/mathematics requirement may choose from the following options:

Satisfactory completion of at least one 200-level mathematics course

Satisfactory completion of at least one science course

Note: MATHEMATICS (MAT) 100 may be used to make up mathematics deficiencies determined by the UNC minimum course requirements (MCRs).

**Mathematics (MAT) 100: Foundations of Mathematics: Algebra (No credit)**

A study of the properties of real numbers, linear equations and inequalities, graphing, polynomials and quadratic equations.

**MAT 100: Foundations of Mathematics: Geometry (No credit)**

A study of parallel lines and transversals, quadrilaterals, regular polygons, similarity, ratio and proportion, right triangle theorems, distance, mid-point formulas, circles, area and volume, prisms, cones, proof exercises. Prerequisite: MAT 100: Foundations of Mathematics: Algebra or equivalent.

**MAT 100: Foundations of Mathematics: Trigonometry (No credit)**

A study of right-triangle trigonometry, trigonometric ratios and applications, the Unit Circle, fundamental identities, Law of Sines, Law of Cosines and application. Prerequisite: MAT 100: Foundations of Mathematics: Geometry or equivalent.

**MAT 101: Foundations of Mathematics: Trigonometry (2 credits)**

A study of right-triangle trigonometry, trigonometric ratios and applications, the Unit Circle, fundamental identities, Law of Sines, Law of Cosines and applications. Prerequisite: Mat 100: Foundation of Geometry or equivalent.

**MAT 201: College Algebra (2 credits)**

A study of real and complex numbers, linear, quadratic, absolute value equations and inequalities, functions and their graphs. Prerequisite: Algebra I, Geometry and Algebra II.

**MAT 202: College Trigonometry (2 credits)**

A study of the six trigonometric functions; the Unit Circle; radians and degrees; graphing trigonometric functions; data analysis using the TI-82 calculator; scatter plots; curve fitting; solving right triangles; oblique triangles; applications. Prerequisite: Mathematics 201 or equivalent.

**MAT 203: Fundamentals of Calculus (2 credits)**

An introduction to calculus for students who have completed College Algebra and Trigonometry. Among the topics studied are limits, the derivative, applications, extrema, antiderivatives, area and the definite integral. Prerequisite: Mathematics 201 and 202 or permission of instructor.

**Science (SCI) 102: Light and Sound (2 credits)**

A study of the wave characteristics of light and sound with emphasis on the application of concepts to music, lighting and color. Attention will be paid to the processes of seeing and hearing.

**SCI 134: Geology of the American Landscape (2 credits)**

A study of the surface processes (rivers, glaciers, groundwater, winds, waves, etc.) that have created the diverse landscapes of the United States. Attention is paid to the artist's response to the landscape.

**SCI 135: Volcanoes and Earthquakes (2 credits)**

A geologic study of two major catastrophic natural phenomena – volcanic eruptions and earthquakes, their impacts on society, and what they tell us about the Earth's interior and the dynamic process of plate tectonics.

**SCI 136: Fossils: A History of Life (2 credits)**

From trilobites to dinosaurs to woolly mammoths – this course follows the fossil evidence of the origins, evolutionary patterns and mass extinctions of life on Earth from its first appearance to the present day.

**SCI 137: Birds and Birding (2 credits)**

An introduction to the biology and identification of birds, including the origin of birds; their anatomy and physiology; their classification and evolution; and their behavior as associated with feeding, reproduction, etc. Learning to identify birds, particularly during spring migration, will be an essential part of the course.

**SCI 154: Stars and Galaxies (2 credits)**

A study of stars – their births, lives and deaths; the groupings of stars into galaxies; and the origin and history of the universe.

**SCI 155: The Solar System (2 credits)**

A study of the planets, moons, and other objects that make up our solar system. The internal structures, external features and surface conditions of these bodies, and an examination of their origins and histories will be considered.

**SCI 210: Nutrition, Behavior and Culture (2 credits)**

A study of the normal nutritional requirements of the human body, the relationship of diet to health, and the impact of behavior and cultural influences on food choices. Students will analyze their own diet relative to recommended standards for young adults. Whenever available, community resources will be utilized for content enrichment.

**SCI 221, 222, 223: Studies in Human Anatomy and Physiology I, II, III (2 credits per term)**

A three-term sequence of study designed to provide a basic understanding of the structure and function of the human body, with an emphasis on aspects that support, produce, and control human movement. Anatomical study and occasional laboratory exercises are an integral part of the course.

**SCI 221: Studies in Human Anatomy and Physiology I**, introduces the basic organization and structure, terminology, physiological concepts and begins study of major organ systems of the body.

**SCI 222: Studies in Human Anatomy and Physiology II**, continues with focused study of organ systems responsible for movement. (Prerequisite: SCI 221)

**SCI 223: Studies in Human Anatomy and Physiology III**, continues study of major organ systems relevant to arts students. (Prerequisites: SCI 221 and SCI 222)

**SCI 227: The Biology of Movement (3 credits)**

An opportunity for students to apply a knowledge of human anatomy and physiology to a more detailed study of the musculoskeletal system and its function in producing human movement. Injury and the prevention of injury will be considered; other activities are designed to help develop an accurate self-perception. Prerequisites: GES 101, 102, 103; SCI 221, 222 and 223 (SCI 223 may be a co-requisite with permission of instructor).

**SCI 240: History of Science (2 credits)**

An exploration of the work of major scientists and the contributions of various ages and cultures to the development of scientific thought. Topics vary from year to year. Topics have previously included: Charles Darwin and evolution, history of astronomy, and scientific explorations. Prerequisite: GES 101 or permission of instructor.

**SCI 290: Contemporary Issues in Science (2 credits)**

A one-term course with flexible content, exploring each year a limited number of physical and biological topics/issues of current interest. Prerequisite: GES 101 or permission of instructor.