

## High School Academic Course Descriptions 2012-2013

### English

#### **ENG 0011, 0012: English I: Composition and Literary Forms (all 9<sup>th</sup> graders)**

English I uses prose, fiction, poetry, and drama to develop a vocabulary for critically discussing and writing about literature. The course explores literature both creatively and analytically with an emphasis on developing a thesis.

#### **ENG 0021, 0022: English II: Composition and Introduction to Literary Critical Analysis (all 10<sup>th</sup> graders)**

English II uses the three main literary genres—prose fiction, poetry, and drama—to develop a student's ability to read and analyze a text, generate an interpretation of its meaning, and communicate that interpretation both in discussion and writing. The class prepares students for college-level writing by fostering a critical awareness of their own writing and the requirements of thesis-driven essays. This class also emphasizes independent work and study skills.

#### **ENG 0025, 0026: Readings and Writings in World Literature for Non-native Speakers of English**

This course for non-native speakers of English emphasizes the skills necessary for analyzing and synthesizing literature through the practice of basic literary analysis. Standard literary terms are introduced and applied to the written analysis of short fiction, non-fiction, plays, and poetry. Works of literature vary each year. Writing workshops, writing conferences, and peer conferences are also a regular part of the course. The course is open to students whose first language is not English, and who have scored the UNCSA minimum requirement of 55 on the SLEP test.

#### **ENG 0031, 0032: English III: American Literature (11<sup>th</sup>-grade option)**

English III engages students in a close reading of influential and representative works of American fiction and non-fiction. Along with regular reading and discussion, the course includes the composition of analytical essays, personal essays, and fiction.

#### **ENG 0051, 0052: Advanced Placement English Language and Composition (11<sup>th</sup>-grade option)**

Advanced Placement English Language and Composition is a seminar-style course for juniors that engages students in becoming critical readers of fiction and non-fiction prose written in a variety of periods, disciplines, and rhetorical contexts. The purpose of such literature is to aid students in understanding a writer's rhetorical and linguistic choices, rather than to study literary conventions. Reading and writing assignments are designed to guide students towards a greater awareness of the interactions among a writer's purposes, his or her subjects, and the audience's expectations, as well as the way generic conventions and the resources of language contribute to effectiveness in writing. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement English Language and Composition exam.

#### **ENG 0041, 0042: English IV: Senior Seminar (12<sup>th</sup>-grade option)**

English IV: Senior Seminar is a seminar-style course in which students read and discuss influential literary works from a variety of historical periods and cultures. Students will write analytical papers as well as personal essays, fiction, poetry, and arts reviews. There will be particular emphasis on discussion skills; students are encouraged to use the class to expand

their ideas and develop their writing. This course expands the curriculum to include texts in a variety of media, including student performances.

**ENG 0043, 0044: English IV: Literature and Film(12<sup>th</sup>-grade option)**

English IV: Literature and Film guides students in viewing film critically as a text to be read and analyzed and explores the intersections of literature and film. The course further develops writing skills through a variety of written responses to texts, with a strong emphasis upon college-level writing requirements.

**ENG 0053, 0054: Advanced Placement English Literature and Composition (12<sup>th</sup>-grade option)**

This seminar-style course for seniors engages students in the careful reading and analysis of all genres of literature. Through close reading, discussion, and writing about literary texts, students deepen their understanding of how writers use language to create meaning. Students will examine how narrative structure, stylistic devices such as figurative language and symbolism, setting, and character development contribute to thematic ideas. Reading assignments are selected from a variety of historical periods and cultures, with a strong emphasis on poetry, drama, and fictional prose (short story, novella, and novel). Writing experiences include responses to poetry and prose passages, in-and out-of-class essays, and a personal essay. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement English Literature and Composition exam.

**ENG 0013, 0014: Yearbook**

The yearbook course is a collaborative business venture whose primary goal is to produce an accurate, thorough, consistent, technically correct record of the lives, emotions, and activities of UNCSA high school students. The yearbook course requires students to take part in all aspects of production of the yearbook including: creating a theme, designing the cover and layout, taking photographs, and writing articles. This course does not satisfy any of the English requirements for graduation

## **Mathematics**

**MAT 0001, 0002: Discovering Algebra**

Discovering Algebra is an introductory algebra course designed to prepare students for Algebra I. Topics of study include simplifying expressions using order of operations, solving linear equations in one variable, solving problems involving proportions and percents, graphing linear functions, and writing equations of lines. Current technology will be used where appropriate.

**MAT 0011, 0012: Algebra I**

Algebra I is one-year, comprehensive course designed to develop a solid foundation of algebra skills. Topics of study include solving linear equations in one variable, graphing and writing linear functions, solving linear systems of equations, solving quadratic equations, and simplifying expressions using laws of exponents. Practical applications and the use of current technology will be included. Prerequisite: placement testing or Discovering Algebra.

**MAT 0021, 0022: Geometry**

This Euclidean geometry course contains an in-depth analysis of the properties of and relationships between geometric objects. The course includes the study of points, lines, planes, angles; polygons, with a special focus on quadrilaterals, triangles, and right triangles; and

circles. Problem-solving is emphasized, and an understanding of proof and logic is developed. Prerequisite: Algebra I.

**MAT 0031, 0032: Algebra II: Foundations**

Algebra II: Foundations is a second year algebra course that includes an extensive review of Algebra I topics. The course includes the study of linear, exponential, and quadratic functions with emphasis placed on the mastery of algebraic skills. Current technology will be used where appropriate. Prerequisite: Algebra I

**MAT 0033, 0034: Algebra II: Advanced**

Algebra II: Advanced reinforces and extends topics begun in Algebra I. The course includes the study of linear, exponential, quadratic, logarithmic, and polynomial functions. Algebraic skills and critical thinking skills will be developed through problem-solving and the use of current technology. This course is a preparation for Pre-Calculus. Prerequisite: Algebra I

**MAT 0041, 0042: Advanced Functions and Modeling**

Advanced Functions and Modeling is designed to further strengthen algebraic manipulation and graphing skills while introducing a selection of other topics and applications. Additional topics may include trigonometric functions, sequences and series, and probability. Concepts will be applied to real-world situations and technology will be used regularly. Prerequisite: Algebra II.

**MAT 0043, 0044: Pre-Calculus**

The central theme of Pre-Calculus is functions as models of change. The course includes study of linear, quadratic, exponential, logarithmic, periodic, rational, and polynomial functions. Emphasis is placed on multi-representational approaches to Pre-Calculus, with functions being expressed graphically, numerically, symbolically, and verbally. This course is designed to prepare students for the study of calculus. Prerequisite: Algebra II.

**MAT 0051, 0052: Advanced Placement Calculus AB**

AP Calculus AB is primarily concerned with developing students' understanding of the concepts of calculus and providing experience with its methods and applications. Technology is used regularly in the course to study the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling. The course emphasizes multi-representational approaches to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Importance is placed upon the connections among these representations. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement Calculus AB exam. Prerequisite: Pre-Calculus or equivalent.

**MAT 0053, 0054: Advanced Placement Statistics**

AP Statistics introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The course includes analysis of data through the use of graphical and numerical techniques to study patterns and departures from patterns; the collection of data through well-developed plans; the development of the use of probability as the tool for anticipating what the distribution of data should look like under a given model; and the use of statistical inference to estimate population parameters and test hypotheses. Important components of the course include the use of technology, projects and laboratories, cooperative group problem-solving, and writing, as parts of concept-oriented instruction and assessment. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement Statistics exam. Prerequisite: Algebra II or equivalent, but Pre-Calculus or equivalent strongly recommended.

## Science

### **SCI 0011, 0012: Physical Science (all 9<sup>th</sup> graders)**

This ninth-grade science course is an introduction to the basic principles of physics and chemistry and provides the foundations necessary to do well in later science courses. Students will learn and refine the following skills in the classroom and in the laboratory: observing; measuring; classifying, gathering, interpreting and displaying data; identifying and controlling variables; problem-solving; and forming conclusions.

### **SCI 0021, 0022: Biology**

Biology presents a study of the basic biological topics, principles, and techniques through lecture, group work, class discussion and laboratory. Topics may include, but are not limited to, the following: the nature, process and history of science; cell biology; the molecular basis of heredity; biological evolution; interdependence of organisms; matter, energy, and organization in living systems; behavior of organisms. Students may also explore the cultural, social, economic and political issues embedded in the biological sciences. This course is offered to students in grades 10, 11, 12. Prerequisite: one unit of high school Environmental or Physical Science.

### **SCI 0031, 0032: Chemistry**

Chemistry provides a study of chemistry concepts in the context of societal issues. This lab-based course emphasizes concepts relevant to the topics and issues under study, the evaluation of data, and decision-making based on knowledge and observations. The course features activities that give students practice in applying their knowledge of chemistry. Prerequisites: Biology and Algebra II or current enrollment in Algebra II.

### **SCI 0041, 0042: Advanced Environmental Science**

Advanced Environmental Science focuses on the following themes: (1) The energy conversions that underlie all ecological processes; (2) the earth as one interconnected system; (3) the role that humans play in altering natural systems; (4) the development of sustainable systems. Prerequisite: one year of High School Biology.

### **SCI 0043, 0044: Physics**

This course provides a lab-based, conceptual and mathematical approach to the study of physics. The course emphasizes problem-solving, data collection and analysis, and presentation and discussion of data collected during laboratory work. Topics may include, but are not limited to, the following: mechanics; electricity and magnetism; sound and light. Prerequisites: Biology and Algebra II.

### **SCI 0045, 0046: Biology Research and Experimental Design**

Biology Research and Experimental Design will give students experience designing and conducting research on subjects of interest to them within selected biological topics. These topics may include animal and plant behavior, genetics, photosynthesis and respiration, cell and molecular biology, and population studies. Emphasis will be placed on data collection, data analysis, and science writing. This course is intended for 11th and 12th graders. Prerequisites: Biology and Chemistry

## **Foreign Language**

### **FRE 0011, 0012: French I**

French I provides an introduction to the basic sounds, speech patterns, grammar and vocabulary of French. Emphasis is placed upon developing proficiency in speaking, listening, reading, and writing while learning about aspects of the Francophone world. Students who have had French in elementary or middle school should ask the instructor/guidance counselor about taking the placement test for French II.

### **FRE 0021, 0022: French II**

French II offers continued study of the language and aspects of Francophone culture, including essential grammar and vocabulary. Focus is placed upon increasing proficiency in speaking, listening, reading, and writing; strengthening the ability to analyze, understand, and apply new concepts; and building confidence in conversational skills. This course includes a review of French I vocabulary and grammar. Prerequisite: French I; placement testing.

### **FRE 0031, 0032: Advanced French**

Advanced French offers an in-depth study of the French language and aspects of Francophone culture, including advanced grammar structure and vocabulary. Authentic Francophone texts, music, videos, and films are used to expand proficiency in speaking, listening, reading, and writing; to strengthen students' ability to analyze, understand and apply new concepts; and to build confidence in conversational skills. The course is conducted primarily in French. Prerequisite: French II; placement testing.

### **SPA 0011, 0012: Spanish I**

Spanish I introduces students to basic grammar structures and vocabulary of the Spanish language, as well as to cultural and social aspects of the Hispanic world. Emphasis is placed on a communicative approach and student participation. Students who have had Spanish in elementary or middle school should ask the instructor/guidance counselor about taking the placement test for Spanish II.

### **SPA 0021, 0022: Spanish II**

Spanish II offers continued study of vocabulary and grammar for communication in Spanish, as well as for a study of Hispanic culture. Emphasis is placed on a communicative approach and student participation. Most of the class is conducted in Spanish. This course includes a review of Spanish I vocabulary and grammar. Prerequisite: Spanish I; placement testing.

### **SPA 0031, 0032: Advanced Spanish**

Advanced Spanish offers an in-depth study of the Spanish language, including advanced grammar structures and vocabulary. This course also includes a study of Hispanic culture, literature, and art. Most of the class is conducted in Spanish. Emphasis is placed on a communicative approach and student participation. Prerequisite: Spanish II or placement testing.

## **Social Studies**

### **SST 0011, 0012: World History (all 9<sup>th</sup> graders)**

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

**SST 0021, 0022: Civics and Economics**

Civics and Economics provides a study of political, legal, and economic systems in the United States and around the world. This course encourages students to hone citizenship skills as they engage in critical issues facing contemporary society. This course is offered for students in grade 10.

**SST 0031, 0032: United States History**

United States History is a survey course that focuses on social, political, economic, and cultural issues and how these issues have influenced American society over time. This course emphasizes the uniqueness of American institutions and their importance in the world today. This course is offered for students in grades 11 and 12.

**SST 0041, 0042: World Cultural History**

This course focuses on the common themes of human experience throughout the world from ancient to contemporary times, enabling students to establish links across time and across cultures. This course is offered for students in grades 11 and 12 who have not completed the UNCSA graduation requirement for World History. May be taken as a social studies elective.

**SST 0043, 0044: Advanced Civics and Economics**

Advanced Civics and Economics provides an advanced study of political, legal, and economic systems in the United States and around the world. This course helps students hone citizenship skills as they engage in critical issues facing contemporary society. This course is offered for students in the 11<sup>th</sup> and 12<sup>th</sup> grades who have not completed the UNCSA graduation requirement for civics and economics. May be taken as a social studies elective.

**SST 0051, 0052: Advanced Placement United States History**

The Advanced Placement United States History course is designed to introduce political, economic, social, diplomatic and cultural concepts of American history from its colonial beginnings to the present day. Great emphasis will be placed upon themes that include American diversity and identity, politics and citizenship, demographic and economic transformations, reform efforts, and diplomacy and war. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement exam in United States History.

**SST 0053, 0054: Advanced Placement European History**

Advanced Placement European History is designed to introduce the wide spectrum of social, political, artistic, and diplomatic changes confronting Europe from the High Middle Ages of the 14<sup>th</sup> century to the present day. Great emphasis will be placed upon the factual intricacies of European history, a variety of historical sources, and the great works of history beginning with the Renaissance. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement exam in European History. This class will be offered in alternating years beginning in 2010-11.

**SST 0055, 0056: Advanced Placement United States Government and Politics**

This college-level high school course gives students an analytical perspective on government and politics in the United States. This course involves both the study of general concepts used to interpret U.S. politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that constitute U.S. political reality. Particular topics include the Constitutional underpinnings of U.S. government; the institutions of national government; political beliefs and behaviors; political parties, interest groups and mass media;

public policy; and civil rights and civil liberties. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement exam in United States Government and Politics. For 11<sup>th</sup>- and 12<sup>th</sup>-graders only, this course meets the Civics and Economics high school diploma requirement at UNCSEA, but may be taken by students who have already completed the Civics and Economics or Advanced Civics and Economics course, or its equivalent, at another school.

**SST 0057, 0058: Advanced Placement Art History (1/2 unit per semester)**

AP Art History is designed to provide the same benefits to high school students as those provided by an introductory college course in art history. In the course, students examine major forms of artistic expression from the ancient world to the present and from a variety of cultures. They learn to look and analyze works of art within their historical context, and to articulate what they see or experience in a meaningful way. A meaningful way to experience works of art is learning to frame an understanding that relates how and why works of art communicate visual meaning. Students can qualify for credit at many colleges upon satisfactory completion of the College Board Advanced Placement exam in Art History.

**Health and Physical Education**

**HEA 0011, 0012: Wellness (all 9<sup>th</sup> graders and others as assigned)**

Wellness introduces students to a holistic approach to wellness and provides tools to cultivate a balanced life. The course topics include physical, emotional, social, intellectual, and occupational health. The course is tailored to be specific to the needs of young artists in a residential environment.

**Policy for Admission of High School Students to Undergraduate Academic Program courses**

Only those high school students who meet the following criteria will be allowed to enroll in UNCSEA Undergraduate Academic Program courses; 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 8 required courses

Grade 12 – 13 units completed, including 10 required courses

Grade average in required courses (English, social studies, math, science): at least 3.0, with no failing grades in these areas.

Acceptable reasons for enrollment include:

- Advanced study beyond that which is offered in the high school curriculum.
- Elective credit in areas not offered in the high school curriculum.
- Early college credit if high school diploma requirements are already completed.

To enroll in Undergraduate Academic Program courses, a high school student must first speak with High School Academic Program at least one week before the start of Undergraduate Academic Program classes each term. The High School Academic Program will verify the

student's eligibility, check to make sure that the requested course will fit into the student's class schedule, and make a formal request on the student's behalf to the relevant Undergraduate Academic Program faculty member. Once this faculty member grants permission, the student will be enrolled in the course.

### **Available Courses**

Eligible high school students may enroll in only one Undergraduate Academic Program course per term, if approval is granted and space permits. Students may select courses from any of the Undergraduate Academic Program offerings except ENG 1101, 1102; MST 1100, 1101; and HUM 2101, 2102; and courses restricted to specific student groups.

### **Textbooks for UNCSA Undergraduate Academic Program Courses**

High school students are responsible for purchasing their own textbooks for Undergraduate Academic Program courses, with the exception of students who have already begun studies of German or Italian at a former high school and need a second year of German or Italian (GER 2101 or ITA 2101) to meet future college entrance requirements. The High School Academic Program will provide texts for GER 2101 and ITA 2101 only, since high school academic courses in German and Italian are not offered by UNCSA.

### **Course Credit**

High school students who later enroll in a college or university may submit their UNCSA Undergraduate Academic Program courses to that institution for transfer consideration. All such courses are transferable as college credit; however, receiving institutions reserve the right to decide how and if these credits will appear on their transcripts. UNCSA high school graduates who later enroll as undergraduates at UNCSA may receive advanced standing for Undergraduate Academic Program courses completed successfully with a grade of "C" or better if these courses were not required as elective credits to meet the UNCSA high school diploma requirements.