

UPPER SCHOOL CURRICULUM GUIDE

2010

INTRODUCTION

The Upper School encompasses the final four years of Heathwood Hall Episcopal School's comprehensive program that strives to address the mind, body and spirit of each student. People and programs are in place to address our students' unique strengths and challenges so that they can achieve, succeed and thrive. Students gain inspiration from South Carolina's most honored independent school faculty. The Heathwood Hall Honor Code provides the foundation for campus life for all students. At Heathwood, 100 percent college acceptance is a time-honored tradition. Community service and the school's spiritual life challenge young people to act on their faith through service to God, neighbors and fellow students. No independent school in the area has seen as many students honored with regional, national and international distinctions. Heathwood believes quality education includes much more than classroom lectures, memorized dates and unrelated facts. A Heathwood student is expected to think critically— by mastering the ability to analyze information, collaborating effectively with others, giving and taking constructive criticism and solving difficult problems. The act of discovery serves as the philosophical centerpiece for Heathwood's program with the ultimate goal of inspiring students to lifelong learning and personal excellence.

GRADUATION REQUIREMENTS

To meet graduation requirements, each student must complete successfully the following.

English 4 credits	Science 3 or 4 credits*
Mathematics 4 credits	Social Studies 3 or 4 credits*
Religion 1 credit	Languages 3 credits (same language)
Fine Arts 1 credit	Physical Education 1 credit
Computer .5 credit	Other 3.5 credits
Senior Exhibition 1 credit	TOTAL 26 credits <i>plus</i> 20 hours community service each year

**A total of 7 credits in the science and social studies disciplines, to be satisfied with a minimum of 3 in one and 4 in the other.*

A maximum of one credit in Physical Education will be granted through full participation in interscholastic athletics, at the rate of 1/4 credit per season. In sequential courses such as mathematics and foreign language, a minimum standard is necessary before the next level of the subject may be undertaken. If the final grade falls in the "D" range, summer work may be required, or the course may need to be repeated the following year.

INTERNATIONAL STUDIES DIPLOMA PROGRAM (ISDP)

Students who wish to go beyond the requirements of the standard Heathwood Hall diploma may elect to participate in the ISDP, a program designed to give students a greater understanding of the issues, history, and structures necessary to be productive global citizens. In addition to taking specified courses in the languages, sciences, and humanities, ISDP candidates must participate in an international experience, complete additional community service, and produce an internationally-themed Senior Exhibition. For more information, consult the Heathwood Edline website.

SENIOR EXHIBITION

In the senior year, every Heathwood Hall student must complete a “Senior Exhibition”, a yearlong project that requires sustained and substantive independent research in an academic area of the student’s choice. The Exhibition, which takes the form of either an academic paper or original product and contextualization, must exhibit knowledge, scholarly research, and appropriate methodology. In the late spring, a public symposium is held, and each student presents his/her work. Upon successful completion of the Exhibition, the senior receives one credit of independent study in his/her academic discipline.

GPA INFORMATION

Heathwood Hall computes GPAs (grade point averages) on a 100-point scale for all Upper School students. These GPAs are calculated from grades received in courses taken during grades 9-12. Both Honors and AP courses are weighted (3 points and 5 points, respectively) in determining the grade point average. The weight is used only to compute the GPA and does not alter the year-end grade on the transcript. Grades for courses in the academic areas of English, foreign languages, history, social studies, religion, mathematics, and science are used to determine a student's academic GPA. Grades from other elective courses, such as PE, Fine Arts, and Yearbook are not used to compute the academic GPA. A few courses are graded on a pass/fail basis, and these receive credit but are not calculated in the student’s GPA.

CLASS RANK

Heathwood Hall has a strong academic program and a relatively small senior class, each member of which is college-bound. It is our belief that a report of each student’s class rank would be statistically invalid. Consequently, class rankings are calculated for in-house use and typically are not included on the school transcript. However, a class rank will be reported when required for certain scholarship consideration and other programs, as necessary.

COURSE REGISTRATION INFORMATION

Upper school students in grades 9-11 are expected to carry a minimum of **six courses each semester**, of which at least four must be academic (English, mathematics, science, history/social studies, foreign languages, religion). Seniors are expected to take a minimum of five courses each semester, in addition to fulfilling the requirements of the Senior Exhibition. Course registration forms will be available for enrolled students in the spring prior to the beginning of the school year, and students should complete the registration form with the utmost care. With the assistance of parents, teachers, and advisor, students choose appropriate classes that conform to the requirements of the core curriculum, as well as the student’s interests and long-term objectives. All Course Registration forms should be signed by both the student and a parent

before being submitted. Students must be formally enrolled with the Business Office for the next school year before being scheduled in any course.

PLANNING CONSIDERATIONS

In planning one's educational program, each student should challenge him/herself by taking a strong and varied course load with a mixture of required and elective courses. It is true that colleges are impressed with students who extend themselves academically by taking extra courses and advanced courses for which they are qualified. It is not wise, however, to overextend oneself. Before making the final course selections, each student should consider his/her entire school involvement, including athletics, service commitments, and other extracurricular activities. Please seek advice from teachers, advisor, and college counselor. All students should examine their curricular progression through their senior year before making the final selection for the next year's course load.

If a qualified student chooses to take courses labeled "Honors" or "Advanced Placement," it is suggested strongly that he/she take no more than two or three of these courses in a single year. Since budget, staffing, and scheduling are carefully planned to accommodate student course requests, we ask students to choose wisely, after fully considering all of their commitments in and out of school.

- Each student must take at least **six courses each semester**, with a minimum of four in academic subjects (English, math, religion, science, history/social studies, and modern/classical languages).
- Elective options in visual or performing arts, computer, and physical education are strongly recommended.
- If a student includes a one-semester course as one choice, he/she must be sure to select one for each semester. Indicate second choices for all electives in case a preferred class is undersubscribed or in conflict with an academic core course.
- Grades and credits from classes at other schools or from online classes are transferable and applicable to the Heathwood graduation requirements as long as they are from fully accredited educational institutions.
- If a student is interested in pursuing Heathwood Hall's International Studies Diploma, he/she should review carefully the requirements of the program and register for classes accordingly. Classes that satisfy the program's requirements are indicated in the Curriculum Guide with an ISDP designation.
- Honors and AP courses are offered to students have demonstrated the aptitude, work ethic, and previous academic performance to be successful. In order to enroll in an Honors or AP course, a student must satisfy the academic requirements and be recommended by the department. Interested students should consult with their current teachers about appropriate course placement.
- Courses designed as "Honors" (H) are accelerated and require a strong background and more intensive preparation than other courses. They will be labeled as "Honors" courses on the transcript and receive a three-point weighting in the GPA calculation.
- Courses labeled "AP" are Advanced Placement courses designed to prepare students for the College Board Advanced Placement examinations. They are the equivalent of college level courses, and taking the Advanced Placement examination is required for completion

of the course. They will be labeled as “AP” courses on the transcript and receive a five-point weighting in the GPA calculation.

- A student may receive credit only once per academic course. If a student repeats an academic course for which credit has been granted, the grade will be reflected on the transcript and calculated in the GPA, but the credit will not be counted as one of the credits required for graduation.
- A year-end grade below C- in an academic course (especially in math and languages) may necessitate summer school or another form of remediation. Failure to follow the School’s recommendations will likely require repetition of the entire course during the following school year.

Upper School Recommended Program at a Glance

	9th	10th	11th	12th
1	English	English	American Literature	English
2	Math	Math	Math	Math
3	Conceptual Physics	Biology	Chemistry	Elective
4	World History	European History	United States History	Elective
5	Foreign Language	Foreign Language	Foreign Language	Elective
6	Religion/Fine Arts	Religion/Fine Arts	Elective	Elective
7	PE/Computer/Study Hall	PE/Computer/Study Hall	Elective/Study Hall	Free Period

Standard

Course Load: 6-7

6-7

6-7

5-6

Upper School Course Guide

ENGLISH

English 9

The 9th grade English course specifically addresses the writing process, vocabulary, grammar, and literature. Students begin their Upper School career with narrative/descriptive writing, allowing them to concentrate on the building blocks of strong personal writing and to focus on sentences and language. Freshmen learn to craft lead lines, create imagery, and incorporate sentence variety while taking ownership of major punctuation rules. Strengthening vocabulary through intensive study of words is also a critical component of English 9. While writing and language intensive, the course additionally covers selected short stories and poetry.

English 10 – European Literature

In the 10th grade, students will read novels and poetry written by European authors from the 14th to the 21st centuries. Students will build on the writing skills learned in the ninth grade, but rather than writing personal narratives, students will learn to write analytical papers about literature. Students will learn to generate an argument or a thesis about their reading and organize a paper to support the thesis. Sophomores will also write a research paper as a joint project with their history class. Finally, they will continue their study of grammar and vocabulary.

English 11 – American Literature and Composition

Emphasizing careful reading, effective writing, and strong vocabulary, English 11 is primarily an American literature course. Authors as diverse as Nathaniel Hawthorne and Sandra Cisneros are studied, and writing assignments vary from the creative poem, to the SAT-practice essay, to the expository/analytical paper, to the research project. Students also study vocabulary regularly to enhance both their reading and writing skills. Such composition elements as organization, clarity, sentence variety, and diction are emphasized throughout the year.

AP English 11 – English Literature and Composition

Requires B+ or higher in previous English classes and departmental approval.

This class is a college-level literature and writing course. Involving students in careful, close reading and critical analysis of short stories, novels, nonfiction prose, drama, and poetry, AP English 11 seeks to sharpen students' awareness and understanding of the means by which writers convey meaning in their works. Along with careful reading, students are required to complete several types of writing assignments, including creative, interpretive, analytical, and evaluative. While some writing assignments are completed outside of class, many are timed, in-class pieces. Such writing skills as organization, analysis, sentence variety, diction, and tone are emphasized. Students study primarily American literature in AP English 11.

English 12 – World Literature and College Writing

This class is designed to expose students to the types of writing they would encounter in a typical university-level freshman English sequence. Students will read and write essays in a variety of rhetorical modes. In addition, students will read literature from around the globe and will continue to hone their skills in writing literary analyses. In addition, students will continue their study of vocabulary.

AP English 12 – English Language and Composition

Requires B+ or higher in previous English classes and departmental approval.

This is a prose-based course with two major goals: to help students become better critical thinkers, readers, and writers and to prepare them to do well on the AP Language and Composition exam. As such, the primary focus of the course is on rhetoric and writing, particularly argumentation, analysis and synthesis. In terms of readings, the first semester is designed to introduce students to world literature through two units: contact with other cultures and responsibility to others. The second semester is organized around approaches to rhetoric and allows students to study various ways in which language can be used to address social issues. Please note: Students enrolled in AP English 12 are required to take the AP test in May.

Senior Exhibition Seminar

Required of all seniors

This class, which seniors will attend once a week, will instruct and support students in each phase of their Senior Exhibition. Seniors will receive instruction in all aspects of research methodology and writing. Specifically, students will work on such topics as formulating a research problem, gathering and evaluating sources, critically reading and outlining sources, notetaking, paraphrasing, summarizing, determining and understanding a documentation style, outlining, integrating quotations, and creating effective oral presentations. In addition, they will be guided in other aspects of the Exhibition process such as how to manage a committee, how to choose and make good use of the outside experts, and how to manage their time and resources.

MATHEMATICS

Algebra I

Algebra I reviews pre-algebra skills and studies a variety of topics in algebra. These topics are approached via traditional practice methods as well as through investigations and problem-solving. The topics include linear equations and inequalities, graphing, systems of equations, powers, radicals, polynomials, quadratic equations, and data analysis.

Geometry

Requires C or higher in Algebra I

This course provides a thorough introduction to classical Euclidean geometry and emphasizes the deductive reasoning process. Topics include a study of lines, angles, triangles, circles, polygons, solid figures, and how they are related. It uses the concepts of coordinate geometry, proofs, congruence, similarity, area, volume, and transformations to analyze the different topics.

Algebra II

Requires C or higher in Geometry

Algebra II is an extension of the skills and concepts developed in Algebra I. It includes the study of various functions, such as quadratic, exponential, and logarithmic. Real and complex numbers, linear equations and inequalities, systems of equations, factoring and its applications, and matrices are also introduced. Throughout the year of study there are applications of these topics to problem solving.

Honors Algebra II

Requires B+ or higher in Geometry and departmental approval

Honors Algebra II is an in-depth study of the topics of regular Algebra II including polynomials, rational and irrational functions and matrices. It provides students the opportunity to develop the skills and knowledge they will need to be successful in their study of upper level mathematics.

Precalculus

Requires C or higher in Algebra II

Precalculus is designed for students to build upon the fundamental high school math sequence (two years of algebra and geometry) and further prepare them for college math study. This course surveys advanced algebraic concepts and trigonometry. Topics include quadratic functions, inverse functions, complex numbers, equations and inequalities, rational functions, analytic geometry, exponents, logarithms, and trigonometry.

Honors Precalculus

Requires B+ or higher in Algebra II and departmental approval

Honors Precalculus challenges the students to investigate and understand topics in Analytic Geometry and Trigonometry. It moves beyond the fundamentals by exploring principals underlying these areas and using the TI-89 to investigate and interpret mathematical behavior.

Introduction to Calculus (one semester)

Requires C or higher in Precalculus

Usually taken in conjunction with Probability and Statistics, Introduction to Calculus is a one-semester course that introduces students to topics that will be covered in a college level calculus course. Students study functions, graphs and models, differentiation and its applications, integration and its applications, and exponential and logarithmic functions.

Probability and Statistics (one semester)

Requires C or higher in Precalculus

Usually taken in conjunction with Introduction to Calculus, Probability and Statistics is designed to provide an elementary introduction to probability and statistics with applications. Topics include descriptive statistics, basic probability models, random variables, discrete and continuous probability distributions, statistical estimation and testing, confidence intervals, and an introduction to linear regression.

AP Statistics

Requires departmental approval

AP Statistics is designed for students who have completed AP Calculus or Introduction to Calculus. The course models an introductory college statistics course and relies heavily on the TI 83/84 calculator and Minitab computer software. Main topics include exploring data, planning a study, anticipating patterns, and statistical inference. Students are expected to take the AP Statistics Exam at the conclusion of the course.

AP Calculus (AB)

Requires B+ or higher in Precalculus Honors or Introduction to Calculus and departmental approval

AP Calculus is comparable to a college calculus course. It is expected that students taking this course will take the AP exam in May to seek college credit. The course emphasizes a multirepresentational approach to calculus with concepts and problems represented graphically,

numerically, analytically and verbally. Topics include functions, limits, differentiation, integration, the fundamental theorem of calculus, continuity and also applications of the above topics.

HISTORY/SOCIAL STUDIES

World History (ISDP)

In World History, a required course for all ninth graders, students learn to recognize how different societies have developed through time. Students learn to recognize, by studying the evolution of ideas, culture, government, and society, how various aspects of our culture have come to us from other times. The course focuses on events from the dawn of ancient civilizations to the development of European nation states with emphasis on geography, religion, art, literature, music, and economics. World History assists students in the development of college preparatory skills including note taking, critical reading, writing and research.

World Geography [grades 9-11] (one semester) (ISDP)

This course is designed to strengthen global perspective and increase understanding about how geography impacts our lives. With a regional approach, students will examine the spatial organization of populations and environments on the Earth's surface, as well as the physical and human characteristics of places. Current issues will be studied as they relate to physical and human geography.

European History (ISDP)

Required of sophomores, this course traces the basic narrative of events and movements in European history from 1300 to 2000. It is a study of the unfolding events, including an analytical understanding of the "change over time" principles involved. The course strives to facilitate a more complete understanding of the cultural diversity of the region as well as the complexity of current European and world affairs. The class will focus on political, religious, artistic, economic, social, and intellectual themes. Students will be expected to work with both original and secondary sources to develop their sense of history as an interpretive discipline. They will be encouraged to develop more sophisticated approaches in their essay writing with a special emphasis on the use of evidence and the development of an argument.

United States History

The regular history class for juniors, this course examines key issues in American political, social, and economic history. United States History emphasizes important college preparatory skills such as essay writing, research, critical thinking, and discussion. A major research paper project is required during the second semester. Topics covered during the first semester include: the American Revolution and the shaping of the Constitution, the Early Republic, the Sectional Conflict, the Civil War, and Reconstruction. In the second semester, the topics include: Industrialization, Progressivism, the emergence of the U.S. as a world power, the World Wars and the Great Depression, the Cold War, postwar American society, and foreign relations in the post-Cold War world.

AP United States History [grade 11]

Requires departmental approval

AP United States History is designed to develop students' analytical skills and factual knowledge of American History. The course provides preparation for intermediate and advanced college courses. In addition to reading various college-level historical interpretations, students examine

a wealth of primary documents, maps, statistics, and pictorial evidence of America's past. Students learn to provide sophisticated written analysis of the central themes and relevant documents of United States history. Classroom activities include lecture/discussions, simulations, and research projects. All students enrolled in this course are required to take the Advanced Placement United States History Examination.

Comparative Government [grades 11-12] (one semester) (ISDP)

This course introduces students to the recent history, political systems, and economic strategies of the United States' 21st century competitors. Focus areas include China, Southeast Asia, India, the Russian Federation, the European Union, the Middle East, and Latin America. Students will select a focus area and will conduct moderated, intensive self-study in preparation to lead class exploration. The goal is to provide students the necessary background to be conversant in analyses of emerging global economies and their potential future impact on U.S. government and business policies.

Economics [grades 11-12] (one semester) (ISDP)

This course introduces the basic concepts of macroeconomics. Economic concepts covered include: aggregate supply and aggregate demand theory, fiscal and monetary policy, the business cycle, GDP, unemployment, inflation and banking. A personal finance unit contains discussions on personal budgets, investments, and the use of credit. The course uses a mixture of textbook readings, handouts, and current articles. The format is interactive, using lectures, simulations, worksheets, and student presentations.

Global Issues [grades 11-12] (one semester) (ISDP)

This course will expose students to many of the global challenges that will be facing our world in the coming years. It is designed around those issues and problems that affect our shared humanity and will require a global commitment to solve. Topics include global warming, poverty, immigration policies, terrorism and the Middle East, global financial stability and education. Students participate in discussions, group exercises, and presentations that are designed to enhance understanding of the complexity of these global challenges.

Health Issues [grades 11-12] (one semester) (ISDP)

This course provides an introduction to important global health issues, including the demographic, sociological, and economic determinants of health; key areas of disease burden; and the role that new health technologies and changes in other global factors can play in solving these problems. The goal of the course is to expand student understanding of the impact of infectious and chronic diseases on the world population with particular attention paid to the health status of women, children and the poor who are disproportionately represented in statistics on illness and death.

Middle Eastern Studies [grades 11-12] (one semester) (ISDP)

This is a brief survey course of the Middle East, beginning with the founding of Islam and continuing to the present. Since the course will be conducted in a seminar format, emphasis will be on readings and class discussion.

Psychology [grades 11-12] (one semester)

This course provides students with an introduction to psychology - the scientific study of behavior and mental processes - using case studies, field experiments, and individual student research. The works of Freud, Skinner, and Maslow are explored, along with other major

contributors to the field of psychology. With a focus on adolescent issues, students review and discuss human development, personality, motivation, and psychological disorders. Students will explore practical applications of psychology and demonstrate the relevance of psychology to daily life.

AP European History [grade 12] (ISDP)

Requires departmental approval

This course is an extensive and in-depth review of European cultural, economic, political, and military history from 1300 to the present. Students will develop a greater understanding of the principle themes in modern European history and will strengthen their ability to express historical understanding in writing. The course will challenge students analytically and prepare them for the AP European History examination in May. Open to seniors, selection is based upon student performance and interest, test scores, and teacher recommendations.

AP World History [grade 12] (ISDP)

Requires departmental approval

AP World History examines the development of global processes from the year 8000 B.C.E. to the present. The course highlights overall themes that receive approximately equal attention throughout the year. These include interaction, change, social structure, technology, demography, manufacturing, agriculture, gender issues, weaponry and intellectual expression. This course is also designed to hone critical thinking skills on objective tests, essay writing and document interpretation. All students who enroll in this course are expected to take the AP examination in May.

SCIENCE

A minimum of three credits are required for graduation, but students seeking admission to a four-year public university in South Carolina must earn a minimum of four credits in science.

Conceptual physics [grade 9]

This is a lab-based qualitative study of the central concepts of physics that include atomic and nuclear physics, matter and energy, electricity, and Newtonian mechanics. The goal of the course is to develop conceptual understanding of basic physical principles while developing critical thinking and problem solving skills. Data collection and analysis are stressed in the laboratory and involve the use of analog as well as electronic data collection techniques. Logger Pro ® and Excel® will be used in data analysis. The pacing and mathematical skills required are appropriate for students currently enrolled in Geometry or Algebra I.

Honors Conceptual Physics [grade 9]

Requires a B+ or better in 8th grade science and concurrent enrollment in algebra II or department approval

This is a lab-based qualitative and algebraic study of the central concepts of physics that include atomic and nuclear physics, matter and energy, electricity, and Newtonian mechanics. The course emphasis is on conceptual understanding and critical thinking and problem solving skills as well as quantitative analysis of physical principles. Data collection and analysis are stressed in the laboratory and involve the use of analog as well as electronic data collection techniques. Logger Pro ® and Excel® will be used in data analysis. The course moves at a faster pace and requires stronger math skills than a non-honors course. The pacing and mathematical skills required are appropriate for students concurrently enrolled in Algebra II. Additional requirements include an extra lab period, as well as the design and implementation of an

independent research project and its presentation at the SC Junior Academy of Science Annual Meeting.

Biology I [grade 10]

Prerequisite: Conceptual Physics

This course is a lab-oriented study of cellular and molecular biology, including photosynthesis, cellular respiration, cell division, and genetics. Extensive plant growth lessons and experiments are conducted in the Robert Clark Greenhouse on campus. Laboratory experiences are integral to encouraging cooperative learning as well as developing understanding of fundamental lab techniques and biological concepts.

Honors Biology I [grade 10]

Prerequisite: Conceptual Physics and recommendation by the science department. Project topic acceptance. Requires B+ or higher in Algebra 2 and in previous Honors science, or an A in general science courses

This course is an inquiry-based study of molecular and cellular biology, including biochemistry, cellular energetics, genetics, biotechnology, evolution, and diversity of life. Critical thinking is fostered with problem solving activities. The pacing and depth of study are designed to prepare students for Advanced Placement science courses. Additional requirements include an extra lab period, as well as the design and implementation of an independent research project and its presentation at the SC Junior Academy of Science Annual meeting.

Chemistry I [grades 11]

Prerequisite: Biology I

This course is a lab-based approach to exploring and investigating fundamental principles and concepts of chemistry. Topics include: matter and behavior, periodic properties and patterns, nomenclature, qualitative/quantitative analysis of reactions, stoichiometry, calorimetry and molecular structure. There is a strong emphasis on concept building, basic problem solving skills, application of math and calculator skills, scientific report writing, and research of related chemical issues.

Honors Chemistry I [grades 11]

Prerequisite: Biology I and Project Topic acceptance. Requires B+ or higher in previous Honors science and Precalculus, or an A in general science courses and Algebra II, and recommendation by the science department

This course is an interactive lab-based study of chemical principles requiring strong problem-solving skills and experimental analysis, sound scientific report writing skills, and ready math acumen. Instructional topics include all those in Chemistry I, as well as additional topics and lab techniques. These include: chemical equilibrium, acids and bases, thermochemistry, spectrophotometry, titrations, and solution preparation. Experimentation is more often student designed with greater mathematical complexity and logical interpretation. Additional requirements include an extra lab period, as well as the design and implementation of an independent research project and its presentation at the spring SC Junior Academy of Science Annual meeting.

Anatomy and Physiology [grades 11-12] (one semester)

Prerequisite: Biology I and Chemistry

This course is a survey of the structure and function of the major human body systems. An introduction to life and body organization and each of the major organ systems of the body will be investigated. Emphasis will be on how the body systems work together to provide

homeostasis, how the body functions in the healthy and diseased states, and bioethical concerns. The laboratory component emphasizes gross and histological anatomy through dissections and investigations of physiological processes.

Astronomy [grades 11-12] (one semester)

This course is an introduction to observational astronomy. Students will utilize a variety of tools, including physical and computer modeling and application of geometry and algebra to understanding the motions of the heavens. It includes an historical analysis of the development of the basic concepts of modern astronomy and of current theories of astronomy and cosmology. Topics include the history of astronomy, the study of gravity and motion, optical astronomy, the solar system, properties of stars, stellar evolution, galaxies, and cosmology. Students must attend at least one after-dark observing session.

Environmental Science [grades 11-12] (one semester) (ISDP)

Prerequisite: Biology I and Chemistry

This course is a study of the interaction among geological, meteorological and ecological phenomena. During this course, basic ecological principles will be investigated and emphasized while addressing the topics of land, water, air, weather, energy and sustainability. It includes in-class laboratory activities and fieldwork.

Biology II [grade 12]

Prerequisites: Biology I and Chemistry

This course is a lab-based sequel to Biology I that includes taxonomy and classification, plant biology, microbiology, gene technology, human evolution, and a comparative survey of the six kingdoms. Extensive plant growth lessons and experiments are conducted in the Robert Clark Greenhouse on campus. Laboratory experiences are integral to encouraging cooperative learning as well as developing understanding of fundamental lab techniques and biological concepts.

Honors Chemistry II [grades 11-12]

Prerequisites: Highly successful completion of chemistry I, precalculus or calculus, and recommendation by the science department.

This course is equivalent to a first semester college general chemistry course and builds on the foundation of Chemistry I. Students will have opportunity to strengthen and expand their understanding of fundamentals and explore new topics in thermodynamics, equilibrium, kinetics, biochemistry, nuclear reactions, and electrochemistry. The course relies on very strong mathematical skills, logical analysis, and confident experimentation. All topics are strongly developed with laboratory experiments, and problem solving as it relates to that experimental data. One additional lab period is required per week, as well as completion of an independent student designed research project and presentation at the SC Junior Academy of Science Annual meeting.

AP Biology [grades 11-12]

Requires B+ in previous Honors science and Precalculus, or an A in general science courses and Algebra II; concurrent enrollment in Honors Chemistry is required for juniors

This course is the equivalent of a two-semester college introductory biology course for science majors. The three general areas of study include molecule and cells, heredity and evolution, and organisms and populations. Emphasis is placed on developing an understanding of major themes including scientific inquiry, evolution, energy transfer, continuity and change, structure and function, regulation, interdependence in nature, and science technology and society. The goals of this course are to help students develop a conceptual framework for modern biology and an

appreciation of science as a process. Successful completion of the AP Biology course will enable students to undertake, as first-year college students, upper level courses for which biology is a prerequisite or to fulfill a basic laboratory science course requirement. Additional lab periods and the AP Biology Exam are required.

AP Physics C — Mechanics [grades 11-12]

Prerequisites: Requires B+ or higher in previous science courses and concurrent enrollment in Calculus or Introduction to Calculus. Concurrent enrollment in Honors Chemistry is required for juniors.

AP Physics C-Mechanics is a college level, calculus-based course in classical mechanics that is designed to prepare students for the AP Physics exam in mechanics. The course objectives are to provide students with an in-depth understanding of Newtonian mechanics and to help them develop successful problem-solving strategies for real physical problems. Students will also develop the skills associated with experiment design, data collection, and various analysis techniques. The main topics in this course are motion, forces, kinetic and potential energy, rotation, angular momentum, equilibrium, gravitation and oscillations. Additional lab periods and the AP Physics C (mechanics only) exam are required.

AP Environmental Science [grade 11-12] (ISDP)

Prerequisites: Requires B+ or higher in Biology I and Chemistry I, and concurrent enrollment in Calculus or Introduction to Calculus; concurrent enrollment in Honors Chemistry is required for juniors

This course is designed to be the equivalent of a one-semester, introductory college course in environmental science. The goal of the course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems, both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Successful completion of the AP Environmental Science course will enable students to undertake, as first-year college students, a more advanced study of topics in environmental science or, alternatively, to fulfill a basic requirement for a laboratory science. Additional lab periods and the AP Environmental Science exam are required.

LANGUAGES (ISDP)

Beginning in the seventh grade, Heathwood Hall students may begin a two-year foreign language study that provides one upper school credit. Students may select among Spanish, French, and Latin. Each class emphasizes grammar, vocabulary, speaking, reading comprehension, and writing skills.

French I

First year students will begin building a working vocabulary to enable them to converse with ease in various daily routine settings. They will gradually be introduced to basic readings to become more familiar to francophone culture.

French II

Requires C or higher in French I or IB

In the second level, there is an important emphasis on oral and aural skills. Students engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions. Students understand and interpret written and spoken language on a variety of topics.

French III

Requires C or higher in French II

In this intermediate course, there is a continuation of the emphasis on oral/aural skills. Students read more challenging pieces of writing, and write more extensively. A more thorough study of grammar allows them to develop more sophisticated levels of self-expression.

Honors French IV

Requires departmental approval; open to high-achieving 11th and 12th grade students with a genuine interest in the study of the French language and culture

Through thematic readings, a study of French cinema, and more in-depth grammar, students are expected to verbalize their ideas and reactions to the readings and the films by participating in class discussion and by writing compositions.

AP French V

Requires departmental approval; open to students who complete satisfactorily Honors French IV

Students continue to reinforce and further their knowledge of literature through the French language. The course includes the study of various literary works, films, short stories, and contemporary topics. One semester focuses on contemporary francophone culture; students demonstrate an understanding of the relationship between cultural practices and perspectives.

Latin I

The students begin building a working vocabulary and become proficient in basic sentence structures and simple Latin syntax. Exposure to more complex elements of structure and syntax prepares the students for Latin II. Students will collaborate with the instructor in choosing cultural topics on which to do research projects.

Latin II

Requires C or better in Latin I or IB

This course builds on the foundation laid in Latin I. The students will continue acquiring a working vocabulary and will become proficient in more complex elements of sentence structure and syntax while learning the basics of paragraph and argument structures, rhetorical and poetic devices, and stylistic considerations. Students will again collaborate with their instructor to choose suitable cultural and historical topics for research projects. Conversational Latin will begin this year. All Latin II students will be required to take the National Latin Exam.

Latin III

Requires C or better in Latin II

This course completes the students' course of grammar and vocabulary and moves them into reading unadapted ancient authors. The students will continue building conversational Latin skills. They will improve their ability to analyze rhetorical and poetic devices, to follow an argument, and to critique the style of a text. They will also begin to use Latin texts as evidence of the culture that produced them. All Latin III students will be required to take the National Latin Exam.

Honors Latin IV

Requires C+ or better in Latin III

Although this is primarily a reading course, the use of conversational Latin will be continued. The students, in collaboration with their instructor, will choose suitable unadapted Latin texts to be read for enjoyment, discussed and critiqued in class, and used to draw conclusions about the authors' culture(s). The three overarching questions for this class will be: What does the text

say? Why does the text express itself in the way that it does? What does the text tell us about the culture that produced it? All Latin IV students will be required to take the National Latin Exam.

AP Latin V

Requires satisfactory completion of Latin IV and departmental approval

This course prepares the students for the AP Latin Exam in Vergil. Students will discuss poetic, rhetorical, and stylistic devices of passages prepared outside of class. They will also be required to read passages at sight, to translate accurately, and to write critically about passages, authors, and their larger cultural milieu. All Latin V students will be required to take the National Latin Exam and the AP Exam.

Spanish I

The level one class is an introductory course that teaches the basics of the Spanish language. Students will learn to carry on elementary conversations, listen to native speakers on DVD, and write and present simple skits from the material studied. At the end of the course, students create and present a power point presentation based on their research on the Aztec civilization.

Spanish II

Requires C or higher in Spanish I or IB

In level two, students continue to develop their Spanish reading and writing skills as they communicate and comprehend more detailed information in the language. They study the present, past and future tenses as well as practice with command forms and object pronouns. This course is an intermediate course where students learn to hold more detailed conversations and create more sophisticated expressions in their writing. They conduct interviews, commercials and newscasts in the language. At the end of the course, students study South America and create a power point presentation based on their research on the Inca civilization.

Spanish III

Requires C or higher in Spanish II

The third in a series of three required consecutive levels, Spanish III introduces more sophisticated sentence structures and verb tenses such as the four subjunctive tenses. Masterpieces of Spanish literature are studied. The students are expected to engage in meaningful conversation with ease, to understand the essential points of a lecture, narrative, conversation or explanation. Students have ample opportunities to do presentations and teach a class. A competency exam is taken in the spring that helps determine placement for level IV along with teacher recommendation and level of achievement.

Honors Spanish IV

Requires departmental approval; open to high-achieving juniors and seniors interested in following the Pre-AP program

Through literary readings, more in-depth grammar, and extensive writing, students are asked to verbalize ideas, do comparative studies and discuss literary points. The reading of Spanish literature in the original form includes short stories, poems and dramas by Federico Garcia Lorca. Listening comprehension is brought to a higher level with audio broadcastings, authentic films and student participation in class discussions. Class presentations incorporating visual aids are assigned monthly.

AP Spanish V

Requires departmental approval; open to students who complete satisfactorily Honors Spanish IV

This course focuses on the preparation needed to successfully master the skills and material for the AP Spanish Language Examination in May. The development of skills in answering Document Based Questions and in recording such answers and presentations are essential to this course. There is an expectation of grammar mastery by the fifth level, and its application to correct writing of essays and short personal correspondence is also crucial. Listening comprehension is broadened by listening and understanding authentic broadcasts and tapings. This is a rigorous course that provides preparation for intermediate and advanced college placement in Spanish.

RELIGION

One credit is required to meet Heathwood's graduation requirement. All of the courses below are one semester in length, so students must take a minimum of two. Some of the classes, as indicated, may be counted as either a social studies or religion credit.

Multicultural Studies [grades 9-10] (one semester)

Multicultural Studies may be counted as a religion or social studies credit. The course is designed to provide students with an introduction to multicultural studies and some of the challenges and opportunities presented by an expanding global and more inter-connected society. Students will examine different cultures within the United States of America. They will explore various expressions for living to include, but not limited to, cultural identifiers such as social class, gender, ethnicity, and religion. Classroom activities will include discussions, small group dialogue, computer lab research, special projects and student presentations.

Mythology [grades 11-12] (one semester)

Beyond merely covering the basics of Greek mythology, this course will look into the primary sources for the myths, both literary and visual, and the ways myths are used and adapted to create meaning and shape thought in society. A special emphasis of the course will be Greek tragedy and its contexts. Mythology may be counted as a religion or social studies credit.

New Testament [grades 9-12] (**A** - one semester; or **B** – yearlong, meeting on alternate days)

This course is an in-depth study of the Gospel of Mark and the historical context of the life of Jesus of Nazareth. Other readings from Holy Scripture and contemporary works serve to expose the students to how Hebrew Scripture and the Christian Testament influence 21st century life.

Old Testament [grades 10-12] (one semester)

This course focuses primarily on the Books of Genesis and Exodus and presents the major historical and literary themes of Hebrew Scripture. This course will provide students with an overview of the Law and the Prophets and an introduction to the shared history of Judaism, Christianity and Islam.

Seminar in Justice [grades 11-12] (one semester)

The Episcopal Church calls for its congregants to “strive for peace and justice and respect the dignity of every human being.” Most other faiths call for a commitment to justice in their traditions as well, and we know that every American who pledges allegiance to their flag and country commits to “liberty and justice for all.” So then what is Justice and why is it so important to us in both philosophical terms and practical realities? This seminar will explore the

developmental, cultural, regional, national, vocational, and legal underpinnings of Justice, and will rely on a multitude of sources (including, but not limited to, The State, guest speakers, some of the hallmark readings from world philosophy, and research documents). Students should be prepared to journal extensively and speak publicly, among other graded requirements. This course may count as a credit for either religion or social studies.

World Religions [grades 10-12] (one semester) (ISDP)

World Religions, a seminar-style course with an emphasis on writing, may be counted as a religion or social studies credit. Students will explore the primary ideas and practices of many different religions. The course requires extensive reading and a final paper or product.

ELECTIVES

Acting [grades 11-12] (one semester)

Acting is a course designed for serious theatre students seeking to explore and develop their acting skills. Students will focus on character creation and development, the actor's tools, and the actor's process. Projects will range from physical and vocal character explorations to monologue and scene study. The course will include a final monologue and scene Showcase. Acting students will also have the opportunity to participate in various productions and attend Drama Festivals throughout the year.

Art I [grades 9-12] (one semester)

This introductory course is a survey of two dimensional techniques designed to teach a systematic approach to One and Two point perspective drawing. The objective is an intentional depiction of "real" space on a flat plane through the utilization of vanishing points, contrast, and Modernist color theory. Students also study proportionally correct figure drawing techniques.

Art II (grades 10-12) (one semester)

Prerequisite: Art I or consent of the instructor

Drawing, painting, printmaking, and collage are examined in the context of various late 19th Century through mid-20th Century artistic styles. This is a production-oriented course, based on Modern art history, designed to introduce the foundations of abstraction. The techniques explored range from Impressionism and Cubism to Dada and Surrealism. The students explore historic works and emulate style while exercising individual artistic intention.

Art In Society [grades 10-12] (one semester) (ISDP)

Prerequisite: Art I or consent of instructor

This course is an exploration of the socio/political role of art throughout the world. The class will seek the role of imagery and artistic story telling through a historic survey of culturally charged artwork, with a concentration on 20th Century examples ranging from Cubism to Feminism.

Band [grades 9-12] (yearlong, meeting on alternate days)

In the upper school band class, instrumentalists continue to develop their music reading skills and knowledge of their individual instruments. An emphasis on overall musicianship is achieved through preparation for performances as a large ensemble and with smaller groups. In addition to two formal performances in the fall and spring, the Jazz Band, Pep Band and various chamber ensembles can be heard throughout the school year at a variety of events and chapel services. Band students also have the opportunity to audition for the South Carolina Region Band and All State ensembles, which are comprised of students representing both public and independent

schools.

Ceramics [grades 10-12] (one semester)

A survey of various methods and techniques used to manipulate clay into form. Slab, coil, pinch, and other hand-building processes will be covered and incorporated with an introduction to the wheel and basic throwing techniques. Sculptural and functional purposes will be examined as various glazing techniques are also explored.

Chorus [grades 9-12] (yearlong, meeting on alternate days)

This course is designed for the performance of musical selections utilizing the study of music theory, music history, and ear training. Students experience training in breathing techniques, posture, diction, intonation, balance and overall musical aspects of the voice. Seasonal concerts and community performances are required functions. Selected students may participate in solo and ensemble festivals, All State Chorus auditions, regional and national festivals. After-school or before-school rehearsals may be required.

Computer: Introduction to Office Software [grades 9-12] (one semester)

This class is an introduction to the use of integrated office software applications. Students will learn to use Microsoft Office, i.e. MS Word, PowerPoint, and Excel, however, the concepts will carry over to others including Google Apps, iWork, NeoOffice, OpenOffice, or Zoho. The class will have practical connections with core classes, and will also provide opportunities to explore "real life" scenarios through projects encouraging excellence. Class time will be used to complete assignments; class materials will be accessed via the school computers and the Internet; assignments will be accepted electronically only and no homework is anticipated. Students will receive a letter grade based on participation and the presentation of their projects.

Computer: Introduction to Programming [grades 9-12] (one semester)

A computer class that will cover the skills and techniques needed to develop computer programs, this class is an introduction to programming that will begin with some history, then touch on logical flow and critical process concepts, as well as Flow Charts, before moving into High level programming (Scratch and Alice). By midterm the class will move into Low level programming, looking first at some of the "dead" languages, but the main focus will be on Java and applets to develop some programs of our own. Class time will be used to complete assignments; class materials will be accessed via the school computers and the Internet; assignments are accepted electronically only and no homework is anticipated. Students will receive a letter grade based on their participation and completion of assignments.

Graphic Arts and Multimedia [grades 9-12] (**A** - one semester; or **B** – yearlong, meeting on alternate days)

This course covers the use of Gimp, painting programs, drawing, 3-D drawing, page layout, PowerPoint, comic book design and a web page design project. Students will use scanning, digital cameras, and the Internet to capture graphics, then import them into projects. Student projects will determine the grade for the course.

Information Technology [grades 11-12] (one semester) (ISDP)

A study of the components of information technology and an examination of the role it plays in today's world. Primary focus will be given to networking, the Internet, communication technologies, and databases. The course also will study some of the interconnected social, economic, and political issues that result from information technology.

Introduction to Journalism [grades 10-12] (one semester)

This class will give students a wide perspective of how today's news is generated and what it takes to deliver news that is accurate and responsible. Students will learn the fundamentals of journalism as well as the more modern news distribution channels, including the Internet and social media. Students will consider creating an on-campus news media product. In addition, this course aims to bring awareness of current events – locally, regionally and around the globe – and why it is critical that today's journalist is familiar with the larger world.

Music Theory [grades 9-12]

Music Theory is a full year course that provides students with an opportunity to study the many building blocks that form a musical composition. Students learn the fundamentals of music notation and spend a great deal of time developing their aural skills through sight-singing and dictation activities. The class equips students with the skills necessary to take the AP Music Theory exam, to interpret a score of music and to compose original music.

Personal Fitness [grades 9-12] (**A** - one semester; or **B** – yearlong, meeting on alternate days)

Personal Fitness is an introductory level physical education course. This course is designed to initiate students' awareness and knowledge of how to properly take care of one's body through strength training and conditioning. Students will take part in an exercise program designed to build a base of strength, agility, core stability and endurance through both simple and complex actions that replicate sport-specific movements. Students will also learn basics of diet, nutrition and physiology of exercise that will culminate in an end of semester written exam.

Public Speaking [grades 9-10] (one semester)

This class provides an overview of the essential skills necessary for effective oral communication as it examines the principles and practices of effective public speaking, argument, and debate. Contemporary and historical speeches serve as models for improving student skills. Students construct and present arguments in a debate format with an emphasis on developing critical thinking skills. Objectives of the class include building self-confidence, enhancing interpersonal relationships, resolving conflict, applying effective interviewing techniques, interacting with groups, dealing with stage fright, and speaking in front of a group. Students present an original oratory piece as a portion of their final exam.

SAT Preparation [grades 10-12] (one semester)

Students will practice techniques for enhancing performance on college admissions exams. Students may opt to take the math or the verbal preparation, or both.

Strength Training [grades 9-12] (**A** - one semester; **B** – yearlong, meeting on alternate days)

Strength Training is an advanced training course focused on building higher-level agility and explosive power through complex movements and exercises. Students will take part in a program that is designed around principles of metabolic training and high-intensity training, focusing on explosive power, speed and core strength. Students will advance their knowledge of diet, nutrition and exercise physiology culminating in the completion of a project at the end of the semester in which they will be asked to develop and present their own training regiment and daily diet plan.

Studio Art (with AP Option)

Prerequisite: two semesters of Art and departmental approval

Designed for highly-motivated students who have completed one full credit of visual art and desire to continue exploration and experimentation in visual communication. The direction of learning is self-motivated and constructively critical. The objective is to create meaningful work that can stand on its own merit, offering the observer the experience intended by the artist, and possibly more. We will track student work by creating a comprehensive portfolio for possible submission for AP credit.

Study Hall [grades 9-11] (**A** - one semester; **B** – yearlong, meeting on alternate days)

No academic credit is given for this faculty-supervised study period.

Theatre Arts [grades 9-12] (**A** - one semester; **B** – yearlong, meeting on alternate days)

Theatre Arts is an introductory course offering students an overview of the dramatic arts. Students will explore acting, directing, technical theatre, and play production. Theatre Arts students will receive first hand play production experience, making design and staging decisions for Heathwood plays. Students will also have opportunities to participate in various productions and attend Drama Festivals throughout the year.

Video Editing [grades 10-12] (one semester)

This course will cover the making and editing of video projects, digital picture enhancement, sound editing and post production DVD creation. The grade for this class will be determined by student achievement in the completion of seven different projects.

Web Page Design [grades 11-12] (one semester)

Prerequisite: Graphic Arts & Multimedia

This course will cover the use of Dreamweaver (web page design program), Fireworks (graphic design program) and Flash (animation design program). Students will use these programs to develop interactive web pages. Student projects will determine the grade for the course.

Wilderness Exploration [grades 9-12] (one semester)

Students are introduced to skills and techniques related to modes of wilderness exploration including climbing, paddling, and camping. At the same time, students explore aspects of ecology and geology as they relate to natural environments conducive to wilderness activities. Field trips to backcountry areas are an integral part of the class.

Yearbook [grades 9-12] (one semester)

This course is designed to support the production and publication of the school yearbook. There is limited enrollment, and excellent English and artistic skills are needed for this class. Students have the opportunity to be creative while they use their writing skills and learn new techniques in layout and composition, photography and teamwork. The software and cameras used in this class are expressly digital, and all layout is completed on the computer. Students work individually to produce their assigned pages, and deadlines are strictly followed. A combination of creativity, attention to detail, and hard work is needed to produce a great yearbook.