High School Course Descriptions



2023 - 2024

ALABAMA HIGH SCHOOL GRADUATION REQUIREMENTS

**English Department**

* **English, Grade 9, Honors (01001H1000)**

**NOTE: FULFILLS ENGLISH CREDIT REQUIRED FOR GRADUATION.**

Advanced work in reading literature, reading informational text, writing, speaking and listening, and language (refer to Alabama Course of Study: English Language Arts, 2010, standards and Appendix B for assistance in literature selection) This rigorous Honors course is designed for highly-motivated students who have already acquired the language arts skills expected of ninth graders. This course expands and integrates listening, speaking, reading, writing, and grammar skills. Students will write a research paper using the MLA format. Library and computer word processing skills are taught. Students will write expository, creative, and critical essays. World literature and many literature themes and forms are studied. **Grade: 9 Prerequisites: 8th grade English**

* **English, Grade 10, Honors (01002H1000)**

**NOTE: FULFILLS ENGLISH CREDIT REQUIRED FOR GRADUATION.**

Advanced work in reading literature, reading informational text, writing, speaking and listening, and language (refer to Alabama Course of Study: English Language Arts, 2010, standards and Appendix B for assistance in literature selection). This rigorous Honors course is designed for highly-motivated students who have already acquired the language arts skills expected of tenth graders. The course expands listening, speaking, writing, reading, and grammar skills. American literature to 1900 and world literature that influenced the development of American literature will be studied. Students will write a research paper using the MLA format. **Grade: 10 Prerequisites: 9th grade English**

* **English, Grade 11 (01003G1000)**

**NOTE: FULFILLS ENGLISH CREDIT REQUIRED FOR GRADUATION.**

Reading literature, reading informational text, writing, speaking and listening, and language (refer to Alabama Course of Study: English Language Arts, 2010, standards and Appendix B for assistance in literature selection)

* **English, Language & Composition AP (01005H1000)**

**NOTE: FULFILLS ENGLISH CREDIT REQUIRED FOR GRADUATION**

This course, equivalent to college English, focuses on language arts skills and nonfiction literature. Students will engage in timed writing, analysis of writers’ style and diction, and preparation for the AP Language and Composition test. Students may receive college credit and/or qualify for advanced standing upon entering college. Students will write a research paper using the MLA format. **Grade: 11 Prerequisites: English 10 with approval of teacher. Students take the AP exam, COST OF EXAM EXTRA.**

* **English, Grade 12 (01004G1000)**

**NOTE: FULFILLSENGLISH CREDIT REQUIRED FOR GRADUATION.**

Reading literature, reading informational text, writing, speaking and listening, and language (refer to Alabama Course of Study: English Language Arts, 2010, standards and Appendix B for assistance in literature selection)

* **English, Literature & Composition AP (1006H1000)**

**NOTE: FULFILLS ENGLISH CREDIT REQUIRED FOR GRADUATION.**

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) Program for English; engages students in the careful reading and critical analysis of imaginative literature from several genres and periods from the sixteenth to the twenty-first century; extensive writing of compositions. This course, equivalent to college English, focuses on language arts skills and world literature. Frequent timed writing of critical/analytical essays is a vital part of this course as these assignments prepare students to score well on the AP Literature and Composition test. Students may receive college credit and/or qualify for advanced standing upon entering college. Students will write a formal, analytical research paper using the MLA format. **Grade: 12 Prerequisites: English 11 with approval of teacher, or Advanced Placement Language and Composition. Students take the AP exam, COST OF EXAM EXTRA.**

**Mathematics Department**

* **Geometry with Data Analysis, Honors (02073H1000)**

Geometry with Data Analysis is the first of three required courses in high school mathematics. In Honors Geometry with Data Analysis, students incorporate knowledge and skills in Geometry and Measurement, Algebra and Functions, and Data Analysis, Statistics, and Probability, leading to a deeper understanding of fundamental relationships within the discipline and building a solid foundation for further study. The prerequisite for Honors Geometry with Data Analysis is either Grade 8 Mathematics or Grade 8 Accelerated Mathematics. For students who opt to accelerate their mathematical pathways in the 9th grade, Honors Geometry with Data Analysis may also be taken concurrently with Algebra I with Probability.

* **Algebra I with Probability, Honors (02052H1000)**

Algebra I with Probability builds upon algebraic concepts studied in Grade 7 and Grade 8 Mathematics. It provides student with the necessary knowledge of algebra and probability for use in everyday life and in the subsequent study of mathematics. Honors Algebra I with Probability is the second of three courses required for all students. Student may enroll in this course after completing Geometry with Data Analysis in Grade 9 or by completing both Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics. Students who which to accelerate their mathematics pathways in high school may also elect to enroll in Honors Algebra with Probability concurrently with Geometry with Data Analysis

* **Algebra II with Statistics, Honors (2056H1000)**

Honors Algebra II with Statistics builds on the students' experience in previous mathematics in Geometry with Data Analysis and Algebra I with Probability. It is the third of three required courses, and it is to be taken following the successful completion of Geometry with Data Analysis and with Algebra I with Probability or the combination of the Grade 7 Accelerated Mathematics and Grade 8 Accelerated Mathematics course sequence. It is the culmination of the three years of required mathematics content and sets the stage for continued study of topics specific to the student's interests and plans beyond high school. Algebra II with Statistics courses are prerequisite for Applications of Finite Mathematics, Mathematical Modeling, Pre-Calculus, and all other approved ALSDE mathematics classes designed for completion of students' fourth mathematics credit.

* **Applications of Finite Mathematics (02136G1000)**

Applications of Finite Mathematics was developed as a fourth-year course that extends beyond the three years of essential content that is required for all high school students. Applications of Finite Mathematics provides students with the opportunity to explore mathematics concepts related to discrete mathematics and their application to computer science and other fields and includes areas of study that are critical to the fast-paced growth of a technologically advancing world. The wide range of topics in Applications of Finite Mathematics includes logic, counting methods, information processing, graph theory, election theory, and fair division, with an emphasis on relevance to real-world problems. Logic includes recognizing and developing logical arguments and using principles of logic to solve problems. Students are encouraged to use a variety of approaches and representations to make sense of advanced counting problems, then develop formulas that can be used to explain patterns. Applications in graph theory allow students to use mathematical structures to represent real world problems and make informed decisions. Elections theory and fair division applications also engage students in democratic decisions-making so that they recognize the power of mathematics in shaping society. The prerequisite for Applications of Finite Mathematics is Algebra II with Statistics. NOTE: Students may not receive credit for both Applications of Finite Mathematics and Discrete Mathematics, as Applications of Finite Mathematics includes mathematics content that also appears in the Discrete Mathematics course.

* **Pre – Calculus (02112G1000)**

**NOTE: FULFILLS ONE OF THE FOUR MATHEMATICS CREDITS REQUIRED FOR GRADUATION.**

Pre - calculus is a course designed for students who have successfully completed the Algebra II with Trigonometry course. This course is considered to be a prerequisite for success in calculus and college mathematics. Algebraic, graphical, numerical, and verbal analyses are incorporated during investigations of the Pre - calculus content standards. Parametric equations, polar relations, vector operations, conic sections, and limits are introduced. Content for this course also includes an expanded study of polynomial and rational functions, trigonometric functions, and logarithmic and exponential functions. Application-based problem solving is an integral part of the course. Instruction should include appropriate use of technology to facilitate continued development of students’ higher-order thinking skills. This course is designed for students considering careers in mathematical or scientific fields of study. Topics include the algebra of functions, transformations involving conic sections, complex numbers, the polar coordinate system, sequences and series, and include extensive work with trigonometric identities, equations, and inequalities. **Prerequisites: Algebra II/Trigonometry; this course requires the use of a graphing calculator.**

* **Calculus AB / BC, AP (02124E1000 / 02125E1000)**

**NOTE: FULFILLS ONE OF THE FOUR MATHEMATICS CREDITS REQUIRED FOR GRADUATION.**

College-level advanced math course approved by the College Board Advanced Placement (AP) program for calculus; functions, graphs, and limits; derivatives; integrals; polynomial approximations and series. This is a college-level course for seniors who have completed a year of Pre-Calculus for AP Calculus. There is an in-depth study of elementary functions, limits, differential calculus, and integral calculus. The selection of topics meets the requirements set forth in the AB Syllabus of the College Entrance Examination Board and parallels the course description for one or two semesters of Calculus at major universities. **Grade: 12 Prerequisite: Pre-Calculus, Purchase of an approved graphing calculator. Students take the AP exam, COST OF EXAM EXTRA.**

**Science Department**

* **Biology, Honors (03051H1000)**

**NOTE: FULFILLS THE BIOLOGY GRADUATION REQUIREMENT; MAY NOT BE DIVIDED INTO BIOLOGY 1 AND 2.**

Covers advanced work in the Biology Core content standards; scientific process and application skills; cell processes; cell theory; photosynthesis and cellular respiration; genetics; classification; plants; animals; ecology; biogeochemical cycles. This advanced course is a faster-paced comprehensive study for college-bound students. Critical thinking skills are developed using labs, scientific processes, and discussion topics including scientific method, matter, cells, DNA, genetics, classification, microbiology, fungi, plants, invertebrates, and vertebrates. **Grade: 9 Prerequisite: 8th grade Science**

* **Chemistry, Honors (03101H1000)**

**NOTE: FULFILLS THE “A PHYSICAL SCIENCE” GRADUATION REQUIREMENT.**

Covers Advanced Chemistry Core content standards; scientific process and application skills; matter classification; carbon chains; periodic table; solutions; kinetic theory; stoichiometry; ideal gases; physical and chemical changes; chemical and nuclear reactions. This is a laboratory-based course that introduces the basic theoretical principles of chemistry with an emphasis on math and problem solving. It is designed for the college-bound student who has an interest in science and math. **Grade: 10-12**

* **Environmental Science (03003G1000)**

**NOTE: DOES NOT FULFILL THE GRADUATION REQUIREMENT FOR BIOLOGY OR "A PHYSICAL SCIENCE**". Study of natural resources, natural hazards, human impacts on Earth systems and global climate change; design engineering solutions to solve various problems affecting Earth and its environment

* **Human Body Systems - PLTW (14299G1002)**

A one-credit course that focuses on human physiology: how the body systems work together to maintain internal balance and good health.

* **Physics, Honors (03151H1000)**

**NOTE: FULFILLS THE “A PHYSICAL SCIENCE” GRADUATION REQUIREMENT.**

Covers Advanced Physics Core content standards; scientific process and application skills; linear, circular, and projectile motion; momentum; planetary motion; quantitative relationships; thermodynamics; wave behavior; light; electrical, magnetic, and gravitational forces; electricity. This is a one-year, lab-based course of fundamental physical science dealing with matter and the transformation of energy. This course is recommended for engineering and science majors. **Grade: 10-12 Prerequisites: Chemistry and Algebra II/Trigonometry**

* **Biology, AP (03056E1000)**

**NOTE: BIOLOGY COURSES 220011, 220012, AND 220013 ARE ALL DEVELOPED FROM THE BIOLOGY CORE. THESE THREE COURSES ARE THE ONLY SCIENCE COURSES THAT FULFILL THE "BIOLOGY" GRADUATION REQUIREMENT. PREREQUISITE: IT IS RECOMMENDED THAT THE AP BIOLOGY COURSE IS DESIGNED TO BE TAKEN AFTER THE SUCCESSFUL COMPLETION OF A FIRST COURSE IN HIGH SCHOOL BIOLOGY AND ONE IN HIGH SCHOOL CHEMISTRY AS WELL.**

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) Program for biology; scientific process and application skills; molecules; cells; heredity; evolution; organisms; populations. This challenging course is designed to be the equivalent of an introductory, two-semester college-level biology course. This course covers topics regularly covered in a college biology course at a fast pace. The goal is to cover the unit topics listed in the College Board Description such as biochemistry, cell biology, bioenergetics; Mendelian, molecular, and population genetics; survey of the domains Eubacteria and Eukarya, structure and function of plants and animals, behavior, and ecology. Students will also be required to perform the twelve biology laboratories mandated by the College Board of AP Biology. This course will prepare students to take the national AP exam. **Grade: 11-12 Prerequisites: B average in Chemistry and Biology courses and approval of teacher; Students take the AP exam, COST OF EXAM EXTRA.**

* **Chemistry, AP (03106E1000)**

**PREREQUISITE: THE COLLEGE BOARD RECOMMENDS THAT THE AP CHEMISTRY COURSE IS DESIGNED TO BE TAKEN AFTER THE SUCCESSFUL COMPLETION OF A FIRST COURSE IN HIGH SCHOOL CHEMISTRY AND A SECOND-YEAR ALGEBRA COURSE.**

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) Program for chemistry; atomic theory and structure; chemical bonding; nuclear chemistry; gases; liquids and solids; solutions; reaction types; stoichiometry; equilibrium; kinetics; thermodynamics. This course is a challenging laboratory science course with a heavy emphasis on mathematical problem-solving skills. It covers primarily the inorganic and physical chemistry concepts usually covered in a first-year college chemistry course. It provides a strong foundation for students wishing to pursue competitive engineering, medical, or other science programs at the college level. **Grade: 11-12 Prerequisite: Chemistry (B average) and approval of teacher; strongly recommend enrollment in Algebra II/Trig or a higher level math course; Students take the AP exam, COST OF EXAM EXTRA.**

**Social Studies Department**

* **World History 1500 to Present, Honors (04053H1000)**

Chronological history of the world: the emergence of a global age; the Age of Revolutions; the Age of Isms; era of global war; the world from 1500 to present

* **United States History I (04102G1000)**

Chronological survey of major events and issues: colonization; American Revolution; development of political system and distinct culture; slavery; reform movements; sectionalism; Civil War; Reconstruction; concepts related to Alabama history and geography. This course is a comprehensive study of the historic development of American ideas and institutions from the Age of Exploration to 1900. While focusing on political and economic history, the standards provide students with a basic knowledge of American culture through a chronological survey of major issues, movements, people, and events in United States and Alabama history. **Grade: 10 Prerequisite: 9th grade Social Studies**

* **United States History II (04103G1000)**

Chronological survey of major events and issues: industrialization; Progressivism; foreign policy; World War I; the Great Depression; World War II; post-war United States; contemporary United States, concepts related to Alabama history and geography. This course is a comprehensive study of critical issues and events in modern United States history. During this course, students gain knowledge of the changing political, economic, and cultural forces at work within the nation; of the impact of the natural environment on all aspects of life in America; and the role of America in the international community. **Grade: 11 Prerequisites: 9th and 10th grade Social Studies**

* **United States History, AP (04057E1000)**

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) Program for United States history. This course is a complete survey course in American history from 1492 to the Present. Advanced Placement U.S. History focuses upon facts and trends that develop human understandings. The course emphasizes the inter-relationships of the various disciplines while developing and reinforcing basic social studies skills.  **Prerequisites: 9th grade World History and approval of teacher Essay writing skills are required; Students take the AP exam, COST OF EXAM EXTRA.**

* **AP European History (04056E1000)**

College-level advanced course following the curriculum established by the College Board Advanced Placement (AP) Program for European history. This course is offered to students interested in research and in-depth reading. The course is designed to prepare students for the College Board Exam in the History of Western Civilization. Course content will be based on the intellectual-cultural and social-economic history as well as the more traditional political-diplomatic sphere from the time of 1450 (the high 90 Renaissance) to Present. Writing, evaluation of primary sources, and critical thinking skills will be stressed.  **Grade: 11 Prerequisite: 10th grade US History AP and approval of teacher; Students take the AP exam, COST OF EXAM EXTRA.**

* **United States Government, Honors (04151H0500) - Semester Course**

Origins, functions, and branches of U. S. government; representative democracy; federalism; political/civic life; analysis of Constitution, Bill of Rights, and other relevant documents; foreign policy. This class is a required one-semester social studies class for the 12th grade. Instruction focuses on the nature of individual civic virtue and responsibility. Students become knowledgeable of the structure and operation of government at all levels in the nation. **Grade: 12**

* **Economics, Honors (04201H0500) - Semester Course**

Basic elements of economics; comparative economic systems and economic theories; role of the consumer; business and labor issues; functions of government; structure of U. S. banking system; role of Federal Reserve bank. Emphasis is placed upon the historical background and current application of economic concepts, methodology and terminology, and upon problem solving as a way of demonstrating understanding. The American economy is emphasized, with study of comparative systems included. The intent of this course is to provide students with the tools to understand and make informed decisions as participants within our economy. **Grade: 12**

**Academy Electives**

* **Financing**

**Accounting (12104G1012)**

A one-credit course designed to help students understand the basic principles of the accounting cycle. Emphasis is placed on basic accounting, analyzing and recording business transactions, preparing and interpreting financial statements, and performing banking and

payroll activities.

**Advanced Accounting (12104G1022)**

Advanced Accounting builds on the foundational knowledge students acquired in Accounting. Standards are designed for students to apply their skills and knowledge in various business situations by performing accounting activities following generally-accepted accounting principles (GAAP). Uncollectible accounts, plant assets, inventory, notes payable and receivable, prepaid and accrued expenses, and unearned and accrued revenues are analyzed, and related adjustments are calculated, and application of managerial accounting techniques are encouraged. Various forms of technology will be used to expose students to the resources and application of accounting principles. Employability skills are incorporated throughout the course standards to meet the needs of business and industry.

**Economics and Financial Services (12105G1001)**

Economics and Financial Services presents basic topics in economics, including the principles and practices of banking, credit, and consumer lending in the United States. Additional emphasis is placed on money management, economic growth and stability, and characteristics of different economic systems and financial institutions. The course includes the major functions of banks and other financial intermediaries, central banking and the Federal Reserve System, current trends in the finance industry, credit functions, principles of credit risk evaluation, loan creation, debt collection, and stocks and bonds.

**Education Seminar – COOP WB I & II (22998G1001 & 22998G1002)**

* **Advertising Design**

**Introduction to Advertising Design (11051G1001)**

A one-credit course that provides students with instruction and experiences in an advertising design laboratory and studio environment.

**Digital Design (12165G1012)**

A one-credit course that provides students with hands-on experiences including computer operations, applications and procedures, type styles, desktop publishing, layout and design techniques, mechanical production files, formats, and workplace-related technology. The prerequisite for this course is Introduction to Advertising Design or an equivalent visual arts credit.

**Graphic Illustration (12165G1022)**

A one-credit course that provides students with experiences and instruction in object and information design. The prerequisite for this course is Digital Design.

**Studio Portfolio (12165G1001)**

A one-credit course that provides students with the opportunity to create projects utilizing traditional and electronic portfolio presentations. This course prepares students for postsecondary education and/or entry-level positions in the advertising design industry. The prerequisite for this course is Graphic Illustration.

* **Engineering and Technology Academy**

**Principles of Engineering - PLTW (21018G1000)**

A one-credit course designed to offer an overview of the engineering profession and fundamental skills utilized in general engineering. A course designed to explore technology systems and manufacturing processes.

**Introduction to Engineering Design (21017G1000)**

A one-credit course that uses a design development process while enriching problem-solving skills. Students create and analyze models using specialized computer software.

**Civil Engineer & Architecture (21021G1000)**

A one-credit course that introduces students to the interdependent fields of civil engineering and architecture. Students learn project planning, site planning, and building design.

**Computer Engineering and Technology (21015G1001)**

Computer Engineering and Technology is designed to explore the process of taking a software idea and turning it into a profitable product. Students will gain knowledge of the phases of a software life-cycle (planning, design, implementation, testing, deployment, and maintenance). Technology will be introduced by exposing students to industry standard tools for implementing the System Development Life Cycle (SDLC) process. This course will be focused on the SDLC but will expose the students to the various architectures used for a successful project. While not required, it is recommended that students have some prior knowledge of programming languages, databases, operating systems, and platforms.

**3-Dimension Solid Model Design I (1107G1012)**

A one-credit course intended to introduce students to three-dimensional modeling utilizing three-dimensional capabilities of CAD software. The prerequisite for this course is Intermediate Drafting Design.

**Career Pathway Project in STEM (21047G1001)**

Career Pathway Project (CPP) for STEM is a capstone course designed for students who have completed two or more career and technical education courses in Science, Technology, Engineering, and Mathematics. This course allows students to utilize their secondary coursework through an experience that showcases their learning. It provides an opportunity for a student to choose an area of interest and engage in an in-depth exploration of the area while demonstrating problem-solving, decision-making, and independent learning skills. The CPP contributes to an educational plan of challenging courses and practical experiences that prepares students for the workplace or for pursuing further education.

* **Business & Marketing**

**Entrepreneurship (12053G1000)**

Entrepreneurship focuses on the skills needed to organize, develop, create, and manage a business in a variety of environments. Course standards are designed to foster an entrepreneurial mindset; encourage innovation, critical thinking, and problem-solving in a fast-paced professional setting; and build basic knowledge of various entrepreneurial ventures.

**Cooperative Ed/WBL (22998G1014)**

Note: The teacher of this course must have earned credit in “Functions of the Coordinator” or “Principles of Coordination.” A one-credit work-based experience requiring a minimum of 270 continuous and successful hours of employment (average of 15 hours per week) performed under the supervision of a workplace mentor and the work-based learning/cooperative education coordinator. **Students enrolled in work-based experiences are required to participate in Cooperative Education Seminar one class period per week.**

* **Information Technology**

**Information Technology Fundamentals (10999C1060)**

A one-credit course that introduces students to the knowledge base and technical skills for information technology careers. Students study the nature of business and demonstrate knowledge of the functions of information systems in business.

**Networking I (10101G1014)**

Note: The teacher of this course must hold A+ or CISCO credentialing.

A one-credit course designed to provide students with skills involving a hands-on, career-oriented approach to learning networking that includes practical experiences. It is recommended that Information Technology Fundamentals be taken prior to this course.

**Networking II (10101G1024)**

A one-credit course designed to provide students will skills involving hands-on learning by installing a router, configuring a server, and performing disaster recovery. The prerequisite for this course is Networking I.

**Networking III (10102G1034)**

**NOTE: The teacher of this course must hold A+ or CISCO credentialing.**   
A one-credit course designed to provide students with the skills needed to perform routing and switching in an enterprise network. Students configure a switch with virtual local area networking and inter-switch communication. The prerequisite for this course is Networking II.

**Foundations of Information Security (10020G1001)**

**Note: The teacher of this course must hold at a minimum CCNA Security, CompTIA Network+, or Certified Ethical Hacker credentials.** A one-credit course that introduces students to the field of Cyber Security. Students will become familiar with Microsoft Windows and Linux Operating Systems. They will learn to use multiple numbering systems and how these systems are used in network addressing and operating system configuration. Students will also gain experience in the areas of vulnerability identification, risk assessment, risk mitigation techniques, WiFi security, IP Addressing, and Informational Ethics. Co-requisite: Students must be concurrently enrolled in Algebra 1 or higher level math.

* **Medical - Health Science**

**Foundations of Health Science (14002G1001)**

A one-credit foundational course that introduces students to integrated academics, employability and career development skills, legal and ethical issues, communications, safety, and life skills. This course is a prerequisite to all courses in the Health Science cluster.

**Emergency Services (410024) – IF YOU HAD Foundations of Health Science**

A one-credit course that introduces students to the emergency medical profession. Course content emphasizes safety, human structure and function, assessment of emergency clients, ethical behavior, and emergency care procedures.

**Therapeutic Services (14099G1000)**

A one-credit course that introduces students to occupations and functions in the therapeutic services pathways. Careers in this area include nursing, medicine, physical therapy, surgical technology, respiratory therapy, emergency medical technician, and more.

**Senior Career Path Proj-Health Science (14997G1000)**

A one-credit course designed for students who have completed a minimum of two career and technical education courses to select an area of interest; engage in in-depth exploration of the area; employ problem-solving, decision-making, and independent learning skills; and present a culminating pathway project before a selected audience.

**Internship (4298G2000) – 2 CR**

A two-credit course focusing on basic knowledge and skills necessary for beginning health care workers. Health Science Internship reinforces and applies knowledge learned in classroom and laboratory settings.

* **Biomedical**

**Principles of Biomedical Science - PLTW (14252G1002)**

A one-credit course that involves the study of human medicine, research processes, and an introduction to bioinformatics. Students investigate the human body systems and various health conditions.

**Human Body Systems - PLTW (14299G1002) – IF YOU HAVE TAKEN PRINCIPLES OF BIOMEDICAL**

A one-credit course that focuses on human physiology: how the body systems work together to maintain internal balance and good health.

**Medical Interventions - PLTW (14299G1003)**

A one-credit course that provides students with experiences in investigating various medical interventions that extend and improve the quality of life including diagnostics, surgery, bio-nanotechnology, pharmacology, prosthetics, rehabilitation, and life cycle choices.

**Senior Career Path Proj-Health Science (14997G1000)**

A one-credit course designed for students who have completed a minimum of two career and technical education courses to select an area of interest; engage in in-depth exploration of the area; employ problem-solving, decision-making, and independent learning skills; and present a culminating pathway project before a selected audience.

**Required Electives**

* **Beginning Kinesiology (08017G1000)**

**NOTE: THIS IS THE ONLY COURSE THAT FULFILLS THE GRADUATION REQUIREMENT FOR PHYSICAL EDUCATION.**

Individualized fitness plan for lifetime fitness. The focus of the required course, Lifelong Individualized Fitness Education (LIFE), is health-enhancing physical activity. LIFE provides the knowledge for a lifetime of healthy living. Through the LIFE course, students learn to apply the various aspects of fitness and assess their own fitness levels. Students are required to develop and maintain an individual level of fitness that forms the foundation for a healthy future. LIFE provides students with the knowledge and ability to construct and implement a lifelong plan for physical activity. LIFE is not the traditional course composed of sport units. LIFE uses a variety of health enhancing physical activities as the vehicle for reinforcing and applying fitness components and principles. **Uniforms may be required. Grade: 9-12 Required introductory course Fee: Cost of Uniform**

* **Career Preparedness (22153G1000)**

A one-half credit course that is taught in Grades 9-12. The course prepares students with content knowledge and skills in the areas of career development and academic planning, computer skill application, and financial literacy. Also, this course is designed to meet the required 20-hour online experience. This course is a requirement for 9th grade students.

* **Health (08051G0500) - Semester Course**

Develops skill for accessing personal health information**.** This is a one-semester course required of all tenth graders for graduation. Topics include: Community Health, Consumer Health, Environmental Health, Family Health, Personal Health, Mental and Emotional Health, Nutrition, Injury Prevention and Safety, Prevention and Control of Disease, and Substance Use and Abuse. **Grade: 10-12**

**Other Electives**

* **Transition Services / Study Hall (22151X1000)**

This course is designed to teach beginning transition skills to junior high/high school students. This course will prepare students to become self-advocates, participate in postsecondary education and/or training to gain meaningful employment and support community participation as they plan for life after high school.

* **Oral Communications (01155G1000)**

NOTE: DOES NOT FULFILL ANY OF THE FOUR ENGLISH CREDITS REQUIRED FOR GRADUATION. Interpersonal communications; group process; media use; informal speeches; interactive reading

* **Journalism (11101G1013)**

NOTE: DOES NOT FULFILL ANY OF THE FOUR ENGLISH CREDITS REQUIRED FOR GRADUATION. Newspaper study; newspaper production; news information gathering; proofreading; journalistic writing

* **Debate (01151G1012)**

NOTE: DOES NOT FULFILL ANY OF THE FOUR ENGLISH CREDITS REQUIRED FOR GRADUATION. Individual work in debate

* **Business Communications (12009G1001)**

Business Communications

* **Entrepreneurship (10253G1000)**

Entrepreneurship focuses on the skills needed to organize, develop, create, and manage a business in a variety of environments. Course standards are designed to foster an entrepreneurial mindset; encourage innovation, critical thinking, and problem-solving in a fast-paced professional setting; and build basic knowledge of various entrepreneurial ventures.

* **Contemporary Issues (04064G1000) - Semester Course**

**NOTE: DOES NOT FULFILL ANY OF THE FOUR SOCIAL STUDIES CREDITS REQUIRED FOR GRADUATION.**

Current events of local, state, national, and international interest; media information analysis, political coverage, and techniques; analysis of current events from geographical, historical, political, social, and cultural perspectives. This course examines the role of the individual in the world community through the study of foreign and domestic issues, global economics, and human geography. Students will expand their skills in reading, listening, writing, researching, and analysis. Students will also learn the basics of historical research and technology-based research. **Grade: 9-12**

* **Spanish I (2052G1000)**

Listening and speaking skills including understanding and responding to simple directions, expressions of courtesy, and questions related to daily routines; reading and writing skills including words and phrases used in basic situational contexts; beginning understanding of Spanish-speaking cultures

* **Spanish II (24053G1000)**

Listening and speaking skills including understanding and responding to directions, commands, and questions; reading with comprehension main ideas from simple texts; writing with comprehension short presentations; further understanding of Spanish-speaking cultures.

* **Spanish III (24054G1000)**

Listening and speaking skills including understanding and responding to factual and interpretive questions; paraphrasing, explaining, and giving cause; interpreting main ideas and supporting details from authentic texts; creating presentations; increased understanding of Spanish-speaking cultures

* **Sociology**

**NOTE: DOES NOT FULFILL ANY OF THE FOUR SOCIAL STUDIES CREDITS REQUIRED FOR GRADUATION.**

Culture and society; social inequalities; social institutions; social change. This elective course is an introduction to many basic concepts used by sociologists—culture, society, rules, and relationships. It offers an introduction to the ways sociologists investigate, describe, and analyze social life. This course examines our multicultural society. **Grade: 10-12 Prerequisite: 9th grade Social Studies**

* **Visual Art I (05154G1001)**

Create; produce; elements and principals of design; two-and three- dimensional techniques and media; art history; art vocabulary; aesthetics; criticism; solution of art problems to communicate ideas; safety issues with handling and storage of materials

* **Visual Art II (05154G1002)**

**PREREQUISITE: VISUAL ARTS LEVEL I OR APPROVAL OF THE INSTRUCTOR.**

Create; visual relationships; problem solve using a variety of media and techniques; elements and principles of design; aesthetics; criticism; art history; art vocabulary; evaluation of artwork; interdisciplinary connections

* **Visual Art III (05154G1003)**

**PREREQUISITE: VISUAL ARTS LEVEL II OR APPROVAL OF THE INSTRUCTOR.**

Create; problem solve; utilize variety of media and techniques; communicate concepts, emotions, intentions; elements and principles of design; technology; independent research; self-directed sketchbook; critical analysis; aesthetics; art history; interdisciplinary connections

* **Introduction to Robotics** **(540031)**

A one-credit course designed to introduce students to the fundamentals of robotics. The course emphasizes fundamentals of electrical current, digital circuits, electronic control systems, and the design and operation of robotic systems.

* **Robotics Applications** **(540032)**

A one-credit course with emphasis placed on the applications of a variety of robotic systems. Students will design and construct a robotic system with peripheral devices. This activity is open to all Lee High School students, as well as students from other schools that do not currently have a robotics team. Students lead the team which works under an organizational structure much like any commercial engineering organization. Adults and mentors advise students as they design, build, and test robots for competition. The team also demonstrates robots to school groups, solicits sponsors, designs logos, documents and publicizes activities and processes, creates computer animations, as well as designing and maintaining a web page.

* **Personal Finance (19262G1001)**

Personal Finance is a foundational course that introduces students to the principles of financial literacy for achieving personal goals. This course is designed to inform students about how the choices they make directly influence their occupational goals, future earning potential, and long-term financial well-being. Content provides opportunities for students to explore consumer behavior, legislation, consumer protection, consumer rights and responsibilities, financial decision-making, advertising and promotional techniques, individual and family money management, banking services, use of credit, income tax, and technology.

* **Exploring Computer Science (10012G1001)**

Exploring Computer Science is an introductory year-long high school computer science course for students in Grades 9-10 focused on foundational computer science concepts and computational practices. Students will be introduced to the breadth of the field of computer science through an exploration of engaging and accessible topics. The course is designed to focus on the conceptual ideas of computing and help students understand why certain tools or languages might be utilized to solve particular problems.   
The goal of Exploring Computer Science is to develop in students the computational practices of algorithm development, problem solving and programming within the context of problems that are relevant to the lives of today’s students. Students will also be introduced to topics such as interface design, limits of computers, and societal and ethical issues. Prerequisite: It is recommended that students have completed Algebra I prior to enrolling or be concurrently enrolled in Algebra I. Exploring Computer Science is designed to be a college preparatory high school course and thus, should provide a rigorous, but accessible, introduction to computer science. No previous computer science experience is required.

* **Computer Engineering & Technology (21015G1001)**

Computer Engineering and Technology is designed to explore the process of taking a software idea and turning it into a profitable product. Students will gain knowledge of the phases of a software life-cycle (planning, design, implementation, testing, deployment, and maintenance). Technology will be introduced by exposing students to industry standard tools for implementing the System Development Life Cycle (SDLC) process. This course will be focused on the SDLC but will expose the students to the various architectures used for a successful project. While not required, it is recommended that students have some prior knowledge of programming languages, databases, operating systems, and platforms.

* **Advanced Kinesiology (08017G1000)**

Elective course that covers the knowledge base of kinesiology, the importance of physical activity in daily life, and the different career paths associated with a degree in kinesiology. This class is for students who wish to pursue a career as a physical education teacher, athletic, trainer, physical therapist, personal trainer, movement-related research specialist, or other careers related to health, fitness, and sports. Prerequisite: Beginning Kinesiology

* **Leaders in Health Advocacy (08099G1000)**

Provides an opportunity for students in Grades 10-12 to become advocates for themselves, their peers, and society as a whole by engaging in activities that promote personal and community health. The class assists the school in meeting the state mandates of character education, Erin's Law, HIV/AIDS requirements, and the Jason Flatt Act through peer helping and student-led planning of school-wide awareness, education, and prevention activities. Prerequisite: Health Education