

12th Grade Curriculum

Human Anatomy & Physiology:

Students will analyze anatomical structures in relation to their physiological function. They will gain new information and develop reasonable scientific explanations by way of inquiry, observation, measurement, data collection and analysis, use of scientific method, and proper laboratory procedures. Students will also pull meaning from technical texts and use content and contextual vocabulary to communicate their investigations and conclusions clearly. Prerequisite: Biology.

Physics:

Physics is an elective, advanced science course that studies the nature of matter and energy and how they are related. Students will gain a better understanding of motion, forces, gravitation, momentum, work, energy, waves, and electricity. Laboratory activities are used to enhance knowledge of content and to expand observational, analytical, critical thinking, and problem-solving skills. Prerequisite: Physical Science and Chemistry

Pre-Calculus:

This course is the fifth course in a sequence of required math courses designed to ensure career and college readiness. This course is designed to prepare students for Calculus and other college level mathematics courses. Pre-calculus is a culmination of learning from previous courses, including Algebra, Geometry, Trigonometry, and Statistics. Students are challenged to develop 21st century skills, such as critical thinking and creative problem solving. Prerequisite: Algebra III

OR

Calculus:

Calculus at FRA is presented with the same level of depth and rigor as are entry level college and university calculus courses. The standards outline a complete college curriculum in one variable calculus. Calculus is a widely applied area of mathematics and involves a beautiful intrinsic theory. Students mastering this content will be exposed to both aspects of the subject.

Prerequisite: Advanced Pre-Calculus.

OR

AP Calculus:

This is equal to a one semester college course. It is designed for the mathematically gifted high school student who is motivated to excel in this field. It will be a collaborative effort among students, teachers, parents and administration to provide intense preparation in a college level course. In following this rigorous curriculum, it is hoped that some or all will be able to take the AP exam in May and earn college credit. The workload will be very challenging. Prerequisite: Advanced Pre-Calculus

12th Grade English –Literature and Composition:

This class has been especially designed for high school seniors to show the relevance of literature to the world today by integrating modern literature with the classics. In this class, traditional, classic literature from the literary canon is paired with current novels, plays and movies to draw parallels in terms of common themes, ideas and literary devices. It is essential that students be able to make a connection with a text, and this format aids them in this connection. Literary devices and elements have not changed, just writing styles and vocabulary. The writing component for this class consists of analysis of the texts, especially in terms of comparing and contrasting.

OR

English Composition I & II (Dual Enrollment)

This is an online college level course that will serve for both a high school English credit and a college English credit. Students will demonstrate the ability to recognize and identify appropriate topics for presentation in writing. Students will also synthesize and logically arrange written presentations. Prerequisite: 3.0 Core GPA and attain a score of at least 970 on the critical reading and math portions of the SAT for the University of West GA. Minimum SAT scores of 450 on the critical reading and 440 for math are required for West GA Technical College.

Economics:

This course is designed to explain how economics is used and the impact economics has on the students' daily lives. Through the study of different economic systems, the class will discuss both social and economic issues that our country faces, and will use their understanding of economics to discuss possible solutions to these problems. Finally, students will also have to create personal budgets so that they have a better understanding of the true cost of living moving forward in their lives.

****Advanced Art:**

This class is a continuation of general art with more concentration on acrylic and water color painting and painting with pastels. Students will work at an advanced level of drawing and painting.

****Choraliers:**

This choir represents the top vocalists at FRA. This course will focus on sight-reading, the St Olaf style of choral tone production, melodic intonation vs. harmonic intonation, and advanced vocal techniques as demonstrated in traditional genres seen throughout the western European history. Students will also learn harmonic theory, Latin musical terms, and world music history. Performing is required. Performances may include: nursing homes, a Christmas concert, church visits, literary competition, and a spring concert. Prerequisite—prior vocal experience.

****Humanities:**

Humanities is a college preparatory course designed to expose students to the study of human culture. It is world history taught chronologically studying the great civilizations of mankind and mankind's contributions in art, music, literature, architecture, theatre, philosophy, religion, and politics. The course is taught using text, visual aids, video, audio, lectures and field trips. Creative projects and cultural visits are required.

****Yearbook:**

The yearbook is more than an annual history book that chronicles the life of FRA students; it is the result of the staff's creativity and personality. Students develop skills in leadership, journalism, photography, creative design, layout, and writing. Students are expected to plan the theme and layout, design pages, photograph events, and write/edit/revise the text of each page while under the constraints of a deadline. Meeting deadlines requires staying after school and homework. Since computers are the production tool, the understanding and use of technology is important. Students understand the role and responsibility of each staff member, and they also understand the importance of teamwork. Teacher recommendation is required, and the adviser seeks students who are "go-getters": self-motivated, responsible, able to write well, and able to perform independently and effectively under "deadline stress. "This class is limited to a maximum of 8 students.

****AP Computer Science Principles:**

This course introduces students to the foundational concepts of computer science and explores the impact computing and technology have on our society. With a unique focus on creative problem solving and real-world applications, the CodeHS AP Computer Science Principles course gives students the opportunity to explore several important topics of computing using their own ideas and creativity, use the power of computing to create artifacts of personal value, and develop an interest in computer science that will foster further endeavors in the field.

****Weight Training and Conditioning Education:**

This class is designed for the student who enjoys physical activity and wishes to increase their strength and overall fitness. The student will be expected to understand and practice a certain level of knowledge of the body, kinesiology, exercise physiology and nutrition. Grading is based upon daily dress-out and participation. Prerequisite: 9th grade PE/Health.