



## **New Courses Offered**

Program of Studies 2016-2017

- o Forensics
- o Landscape and Floral Design
- o Robotics
- o 3D Design II
- o Dance
- o Statistics and Probability
- o Korean I
- o Mandarin Chinese I
- o Marketing Education/Cooperative Work
- o Topics in Computers and Technology Honors
- o Sports & Entertainment Management
- o Myth, Fantasy & Science Fiction (2.5 credits)
- o The Graphic Novel (2.5 credits)
- o Movies and Literature
- o Literature, Film and Culture of Asia
- o Journalism II
- o Italian Honors (levels 2,3,4)

## Science Electives

### Robotics

**Grade Level:** 10-12 **Prerequisite:** Geometry

The Fort Lee High School robotics curriculum engages 10th, 11th, and 12th grade students to use science, engineering, technology, math, and writing skills to design, build, and program robots in a hands-on project based setting. This course provides students the opportunity to test their critical thinking, decision making, computational computing, and collaborative skills in an fast moving, energetic, and creative environment. Students learn how to program their robots using the Interactive C programming language. Students will have the opportunity to compete with their peers with the hope of representing Fort Lee High School in the Regional Botball Competition. The STEM skills developed in this robotics course will serve students well in the technology based world we live in.

### Landscape and Floral Design

**Grade Level:** 12 **Prerequisite:** Concepts of Chemistry RC

The course presents the fundamental principles of horticulture with a focus on ornamental horticulture and career exploration. Topics include the study of plant form function and reproduction with an overview of plant diversity. Students will demonstrate teamwork skills to coordinate diverse multidisciplinary teams. Floral design, landscape, greenhouse and nursery production along with supervised learning experiences are introduced and explored. Use of greenhouse and classroom activities will allow students genuine hands on learning experiences.

### Forensics

**Grade Level:** 11 & 12 **Prerequisite:** Biology

This elective course focuses on various aspects of forensic science and modern criminal investigation analysis. Forensic Science incorporates many different subject areas such as the following: Biology, Chemistry, Earth Science, Physics, Psychology, and Mathematics. The topics covered in Forensic Science will include but are not limited to the following: Crime scene processing, fingerprint identification, hair and fiber classification, handwriting analysis, serology, DNA fingerprinting, identification of human remains, ballistics, toxicology, and drugs.

## Art Electives

### **3D Design II**

**Grade Level:** 10-12 **Prerequisite:** 3D Design (Formally Crafts)

3-D Design II will build upon the students' prior knowledge developed in Crafts or Art 1. Students will have an opportunity to explore craft media more deeply and in more challenging ways and develop an independent focus for the year (i.e., self-portraits, the natural world, urban living, etc.) The scope of the course encompasses bookmaking, fiber studies, sculptural clay handbuilding, and mixed media sculpture. Visual art elements and principles of design will be reflected in students' work as they develop weaving, sculpture, and assembly skills in order to build a comprehensive portfolio of three-dimensional design. Students will also study the indigenous craft traditions concurrently with the media they use in class. This class allows students who flourished in 3D Design (Crafts 1) to continue their studies in three-dimensional media at a more advanced level.

### **Dance**

**Grade Level:** 9-12 **Prerequisite:** None

Dance I is designed for students in grades 9 – 12. The course will immerse students in the fundamentals of classical dance forms and concepts. They will learn basic barre, center and floor exercises, body isolations and strength building exercises. This course also offers instruction in the historical influences of dance, dance aesthetics and performance techniques. Activities will allow students to experience the creative process in choreographing and performing dance routines.

## Math Elective

### **Statistics and Probability**

**Grade Level:** 10-12 **Prerequisite:** Algebra, Geometry, Algebra II

Students in Statistics and Probability will be introduced to the basics of data analysis. The scope of the course will include the identification of samples and sampling techniques, analyses of data using a variety of statistical tests and measures, different graphical representations of data and distributions, and the application of probabilities as a predictive tool. Throughout the year, students will participate in several projects in which statistical studies are carried out and sound statistical analysis is applied. Students enrolling in Statistics and Probability will have completed Algebra, Geometry and Algebra II as prerequisites for entry.

## **World Languages**

### **Korean**

**Grade Level:** 9-12 **Prerequisite:** None

Students will learn the basics of Korean pronunciation with an emphasis on developing the fundamental skills of speaking, reading, listening and writing characters with a goal of applying it to familiar, everyday concepts such as greetings, foods, school and family. In addition, Korean culture will be explored through readings, video clips, and movies.

### **Mandarin Chinese I**

**Grade Level:** 9-12 **Prerequisite:** None

Students will learn the basics of Mandarin Chinese pronunciation with an emphasis on developing the fundamental skills of speaking, reading, listening and writing characters with a goal of applying it to familiar, everyday concepts such as greetings, foods, school and family. In addition, Chinese culture will be explored through readings, video clips, and movies.

## **21<sup>st</sup> Century Life and Careers/Technology**

### **Marketing Education/Cooperative Work (5-15 credits)**

**Grade Level:** 12 **Prerequisite:** None

Marketing Education/Cooperative Work will encompass learning 21<sup>st</sup> century skills in a real working environment. In order to participate in the Marketing Education Cooperative Work/Study Program class a student must be employed a minimum of fifteen hours per week in an approved business establishment. Employed students earn a total of ten to fifteen credits. The course will help transition students into the workforce or college classroom while developing resume & interviewing skills, time management skills and technology skills.

### **Topics in Computers and Technology Honors**

**Grade Level:** 12 **Prerequisite:** None

This honors level course gives students an opportunity to choose a topic of interest for independent study. Sample topics include exploring programming paradigms or languages, advanced web design, graphics/multimedia development and A+ or Oracle certification programs. The student must develop a curriculum, including an assessment model, and have it approved by the teacher before beginning the course. Depending on the topic and student schedule, the duration of this course can be anywhere from a single marking period to a full year.

## **Business**

### **Sports & Entertainment Management**

**Grade Level:** 12 **Prerequisite:** None

This course will provide students with an overview of marketing and advertising in the sports and entertainment field by using Fort Lee High School events as their “clients” and the student body and community as their “target market”. Students will also learn the impact sports marketing and advertising has economically as well as socially. Students will use what they learn to create marketing plans and goals for specific school activities and sporting events.

## **English Electives**

### **Literature, Film and Cultures of Asia**

**Grade Level:** 11-12 **Prerequisite:** None

A survey of works representative of Asian civilization and culture from the classical to the contemporary. Readings include fiction written in English and English language translations of historical, religious, and fictional texts originally composed in Hindu, Chinese, Korean, and Japanese. The function of food and drink as they appear in religious, philosophical, cinematic, and literary works of Asia serves as a unifying theme of the course. This course examines various aspects of culture in both premodern and modern Asia, ranging from literature, art, performance, and cuisine to contemporary pop culture (film, manga, anime. etc.).

### **Myth, Fantasy and Science Fiction (2.5 credits)**

**Grade Level:** 10-12 **Prerequisite:** None

This course will engage students in the exploration of social and cultural themes developed in ancient mythologies, modern mythologies, science fiction, fantasy, and legends, and how these stories relate to our lives today. The aims of the course will include at least enjoying the reading, learning about each work, studying the diverse forms these genres have recently taken, and understanding the reasons fantasy and science fiction are currently so popular. Students will examine how these works have anticipated and continue to reflect change in our society. The curriculum will include short stories, novels, essays, and poems by such authors as Homer, Isaac Asimov, Ray Bradbury, Ursula Le Guin, George Orwell, J. R. R. Tolkien, J.K. Rowling, and others.

### **The Graphic Novel (2.5 credits)**

**Grade Level:** 10-12 **Prerequisite:** None

The interdisciplinary course combines literary and historical approaches to investigate one of the most rapidly growing and increasingly influential forms of literature: the graphic novel. This course is designed to examine the evolution, subject matter, form and future of the graphic novel genre. It will include a historical overview of the form's development across the 20<sup>th</sup> century. The focus will be on how artists create stories and characters that matter in this genre and how to interpret and contextualize such works. Students will study the conventions and possibilities of the graphic novel through reading, discussion and guest lectures by graphic novelists. Providing students with the critical skills necessary to read and understand this deceptively complex medium—and visual storytelling in general—the course exposes students to a series of works that define and redefine the genre while illustrating a variety of artistic & storytelling approaches to central themes of the American experience. What is the connection between text and art? How are internal psychology, time, and action conveyed in a static series of words and pictures? What can the graphic novel convey that other media cannot?

### **Movies and Literature**

**Grade Level:** 10-12 **Prerequisite:** None

Motion pictures, much like novels, can be read and understood as reflections of the geographic, economic and social environments that produce them. In Movies and Literature course, students will look at landmark films, and consider how movies connect with other arts, social and political currents, and how film itself forms a distinct medium of expression. An emphasis in this course will be placed on expository writing; however, we also participate in journal keeping, active critical viewing, analytic writing, and seminar discussion. Units will explore the novel, the short story, poems, and essays, and film while examining the issues and elements pertaining to the genres and examining the role of director as author. This course investigates the similarities and differences between film, art and traditional literary forms. To accomplish this, emphasis will be on viewing a number of films, reading creative literature and nonfiction, writing critically, and researching. A second emphasis will be placed on similarities and differences between literature and artistic representations.

### **Journalism II**

**Grade Level:** 10-12 **Prerequisite:** Journalism

News happens fast and often. They say “the news never sleeps” and they may be right (whoever “they” are). **Journalism II** is an advanced course in journalistic reporting and writing devoted to learning how to prepare in-depth articles on issues and events of Fort Lee High School and the Fort Lee community. Students will extend their knowledge of the legal and ethical issues facing journalists today. Emphasis will be on the techniques, ethics, and responsibilities of conducting interviews and research, crafting pieces for newspapers and other publications, and applying photography and videography skills in reporting news. Students will develop a portfolio of writing samples, proposal ideas and letters for the editor of The Fort Leeder and other popular newspapers, magazines

and online publications. In addition, students will apply layout and design concepts using Adobe InDesign to design pages for newspapers and magazines