3739 – AP Computer Science

4 credits

Level: Advanced Placement

Prerequisite:

> *Introduction to Programming II (or permission of the Department Head for students having past programming experience).*

The goals of this course are comparable to those of a first-semester college course in computer science. The course is intended to serve both as an introductory course for computer science majors and as a substantial course for those who will major in other disciplines that require significant involvement with computing. The course uses Java as the programming language and emphasizes object-oriented programming methodology, algorithm development, and problem solving. It also includes the study of data structures and abstraction. The Advanced Placement Computer Science exam is expected of all students in this course. More information can be found at <http://www.collegeboard.com/student/testing/ap/sub_ compscia.html>.

3746 – Advanced Computer Programming

2 credits – semester (may be repeated for credit)

Level: CP1

Prerequisite:

> *Teacher recommendation.*

This course is designed to allow students to experience how a real-world computer application comes to life. This course builds on their previous programming skills and includes more advanced GUI techniques. In addition to smaller projects, students will work together to complete a large programming project of their choosing by the end of the semester. After many weeks of coding, they will complete an online help file and present their work to the class.

3610 – Computer Applications

2 credits – semester

Level: No Level

Prerequisite:
>   *None*

This is an introductory course in the computer applications that are used daily in such activities as presentation, desktop publishing, information processing and decision-making. The course will prepare students to create documents, presentations, and spreadsheets using Microsoft Office, to edit images and video using iPhoto, the Photoshop creative suite, and iMovie, to create a basic web page that incorporates many of the projects completed in the class, and to begin writing computer programs using Scratch. Classes will be project-based. Students from all grades and academic levels are encouraged to enroll.

6430 – Web Design

3093 – Math Teaching Assistant Program

Credits: Variable based on teaching blocks per week (maximum of 0.5 credit per quarter)

Level: No Level

Prerequisite:
>   *Teacher recommendation and Department Head approval.*

Grading: Pass/Fail

Under the close supervision and guidance of mentor teachers, students serve as teaching assistants to provide additional support for students who struggle mathematically in our ninth grade courses. Teaching assistants experience first-hand the teaching and learning process from an educator's perspective, come to understand and value what it takes to make mathematics accessible to all students, and make connections with younger students that foster academic achievement and meaningful relationships. If you are interested in becoming a teaching assistant, please see your current mathematics teacher or the Mathematics Department Head for more information.