

Programming, Games, Apps, and Society

Course Syllabus

Instructor: Mrs. Sonja Goins

E-Mail: sonja.goins@henry.k12.ga.us

Semester: Fall 2019 and Spring 2020

Phone Number: (770) 954-9515

Room: #516

PROGRAM CONCENTRATION:

CAREER PATHWAY:

COURSE TITLE:

Information Technology

Programming and Computer Science

PGAS Course Number: 11.47200

Course Description:

Are you ready to design and develop? The course is designed for high school students to strategize, design, and develop games and mobile and desktop applications that can be produced in the real world. Students will learn about life-cycles of project development and use models to develop applications. Attention will be placed on how user interfaces affect the usability and effectiveness of a game or an application. Programming constructs will be employed which will allow students' applications to interact with "real world," stimuli. The course exposes students to privacy, legality, and security considerations with regards to the software industry.

Various forms of technologies will be used to expose students to resources, software, and applications of programming. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are enhanced in this course to prepare students to be college and career ready. Employability skills are integrated into activities, tasks, and projects throughout the course standards to demonstrate the skills required by business and industry. Competencies in the co-curricular student organization, Future Business Leaders of America (FBLA), are integral components of the employability skills standard for this course.

Programming, Games, Apps and Society is the third course in the Programming pathway in the Information Technology cluster. Students enrolled in this course should have successfully completed Introduction to Digital Technology and Computer Science Principles. After mastery of the standards in this course, students should be prepared to take the end of pathway assessment in this career area.

21st Century Skills – Communication; Collaboration; Citizenship (Digital); Critical Thinking

Course Standards

IT-PGAS-1: Demonstrate employability skills required by business and industry.

IT-PGAS-2: Describe the software application life cycle and use a prototype development model to develop applications.

IT-PGAS-3: Design and develop applications using objects.

IT-PGA-4: Design, develop, and implement accessible and usable interfaces, and analyze

IT-PGA-6 Evaluate an application design in terms of meeting privacy needs, legal and intellectual property requirements, and security considerations.

IT-PGA-7: Develop applications that read real-world data from sensors, interpret the data, and respond to the real-world stimuli.

IT-PGA-8: Describe the unique needs for information and communication technologies for diverse audiences.

applications for engaging the user.

IT-PGA-5: Use and implement different digital representations of media.

IT-PGA-9: Explore how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects, entrepreneurship development, and competitive events.

Recommended Materials:

1. 1 Subject Notebook or 3-Prong Folder (plastic) with Paper
 2. Pen or Pencil
-

Evaluation and Grading/Assignments		
Grading Policy:		
Task Groups (Categories)		A: 90 and above
Class (Daily Work)	40%	B: 80 – 89
Assessments/Projects	40%	C: 74 – 79
Final Exam	20%	D: 70 – 73
Course Final Average	100% (Task Groups)	F: 69 or below

New Electronic Device Policy:

The purpose of the new electronic device policy is to make sure that there is no distraction to the learning environment and that every student can be completely focused on academic achievement.

If a student is in possession of any electronic devices (smartphone, tablet, etc.), then those devices must be placed in an assigned pocket of a classroom phone caddy during every class period including instructional focus. If you have more than one device, (ex: multiple smartphones, and/or tablets), then both items must be placed in the assigned pocket. Students will be allowed to use their devices in the morning in the commons area before first period, between class changes, and during lunches (as long as they are not speaking on the phone or playing music that others can hear).

Please note that failure to comply with this expectation will result in a discipline referral and appropriate consequences will be given. Also, ELHS is not responsible for lost or stolen electronic devices. Students are encouraged to leave “non-instructional” personal items at home. The school-issued Chromebooks are the only electronic devices that are needed in the instructional setting.

Expectations for Academic Success	Additional Requirements/Resources
<ol style="list-style-type: none"> 1) Complete daily classwork assignments 2) Participate in class discussions and ask questions 3) Participate constructively as a team member 4) Problem solve and accept challenges 5) Challenge yourself to continuously improve 	<ul style="list-style-type: none"> • Acceptable Computer Use Policy • Tutoring Available

Notice of Equal Opportunity: <http://schoolwires.henry.k12.ga.us/Page/49720>