

COURSE T	ITLE:	Introduction to Software Technology		
TEACHER	NAME:	Ms. Lidan Zhou	E-MAIL:	LZHOU@forsyth.k12.ga.us
ROOM: 474		PHONE: EXT:	770 781 2264 100474	

# Forsyth County Schools Course Syllabus 2022/2023

**Course Description:** Introduction to Software Technology is the foundational course for Cloud Computing, Computer Science, Game Design, Internet of Things, Programming, Web and Digital Design, and Web Development pathways. This course is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Exposure to foundational knowledge in programming languages, software development, app creation, and user interfacing applications are all taught in a computer lab with hands-on activities and project-focused tasks.

**Standards:** Forsyth County offers many State Board of Education approved CTAE Career Pathways with three sequenced courses. *To view course standards, pathway guides, and plans of study, visit the following links:* 

Standards: <u>https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/cluster-pathway-</u> courses.aspx

Programs of Study: https://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Programs-of-Study.aspx

Standard 1 in all CTAE courses is to demonstrate employability skills required by business and industry. This includes communication, demonstrating creativity, exhibiting critical thinking and problem-solving skills, modeling work readiness traits required for success in the workplace, and applying the appropriate skill sets to be productive in the workplace. Standard 1 also places emphasis on presenting a professional image through appearance, behavior, and language.

**CTSO Affiliation (Career Tech Student Organizations):** CTSOs are co-curricular organizations with leadership programs and competitive events which reflect current curriculum standards and competencies for the instructional programs they serve. Teachers infuse CTSO activities into the instructional activities, thereby helping students see the real world value of their academic studies. The CTSO for this course appears below, and students are encouraged to take advantage of these additional leadership opportunities.

**FBLA:** The mission of Georgia FBLA is to bring business and education together in a positive working relationship through innovative leadership and career development programs.

Required Assignments: Projects could include those listed below but will be supplemented

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based on teacher discretion.

- FBLA Scratch Presentation
- Create a website using HTML and CSS
- Robotics Programming using VEX robot and Sphero robot
- Develop a Mobile App
- Create a 2D Platformer Game using Unity C#
- Create a Machine Learning program: Chatbot
- Create a digital Art using Python

Unit 1	FBLA Introduction
Unit 2	Digital Citizenship
Unit 3	Workforce Development Skills
Unit 4	HTML and CSS
Unit 5	Robotics Coding
Unit 6	Python Coding
Unit 7	Mobile App Development
Unit 8	Programming Game using Unity
Unit 9	Artificial Intelligence and Machine Learning
Unit 10	Computer Basic and Cybersecurity
Unit 11	Business Ethics

Availability for Extra Help: Schedule time with Ms.Zhou before school, after school, or during IF.

### Class Supply: None

**Makeup Work:** Make up work is defined as work assigned during a student's absence, not work assigned prior to an absence. The student has five (5) school days upon returning to school to complete make-up work. The teacher has the discretion to grant a longer period to make up work, if there are extenuating circumstances.

### **Grading Calculations:**

**Non-EOC Course Average** = 50% (1st Sem. Course Work) + 50% (2nd Sem. Course Work) 1st and 2nd Semester Course Work = 75% Summative + 25% Formative

#### **Grading Policy:**

A = 90 - 100 B = 80 - 89 C = 70 - 79Failing = Below 70

Formative Assessments include, but are not limited to homework, class work, practice tests, rough drafts, and sections of projects/ research papers/presentations.

Summative Assessments include, but are not limited to unit tests, final projects, final essays, final research papers, and final presentations.

A quality point is provided to students who successfully complete the entire course which is designated as Advanced Placement, International Baccalaureate, or Dual Enrollment.

**Learning Resources/Textbook(s):** All learning resources, both print and digital, are meant to support and enhance the student learning experience of this class. Below are the names of the textbooks and websites that will be used in this course. Some of the web-based resources require parent permission per federal regulations. Federal laws that guide parent permission requirements are as follows:

- Children's Internet Protection Act (CIPA): The school is required by CIPA to have technology measures and policies in place that protect students from harmful materials including those that are obscene and pornographic. Any harmful content contained within inappropriate sites will be blocked. <u>http://fcc.gov/cgb/consumerfacts/cipa.html</u>
- Children's Online Privacy Protection Act (COPPA): COPPA applies to commercial companies and limits their ability to collect personal information from children under 13years of age. No personal student information is collected for commercial purposes. <u>https://www.ftc.gov/tips-advice/business-center/guidance/complying-coppa-frequently-askedquestions-0</u>
- Family Educational Rights and Privacy Act (FERPA): FERPA protects the privacy of student education records and gives parents the right to review records. Under FERPA, schools may disclose directory information in certain circumstances. <u>http://www2.ed.gov/policy/gen/guid/fpco/ferpa</u>

Please review the resource list. Each website related to the curriculum resources is provided along with their privacy policies. Should you have any questions regarding these resources immediately contact the course teacher via email or phone.

Name of Resource*	Hard copy/Website	Privacy Policy
Virtual Job Shadow	Website	https://www.virtualjobshado
		w.com/resources/policy/
EVERFI Digital Lessons	Website	https://everfi.com/privacy-
		policy/
TestOut Online Training	Website	https://www.testout.com/co
		mpany/privacy
Certiport/Pearson Microsoft	Website	https://home.pearsonvue.co
Resources		<u>m/privacy</u>
Adobe Certified Associate (ACA)	Website	https://home.pearsonvue.co
		<u>m/privacy</u>
Adobe Creative Cloud	Website	https://www.adobe.com/
YouScience	Website	https://www.youscience.co
		m/privacy-policy/
Talk Hiring Job Interview Practice	Website	https://www.talkhiring.com/
* The Collection and the control of t		privacy-policy

\* The following resources are county approved. These resources may vary by school due to sequencing, pacing, curriculum design, and/or individual needs of students.

Parent Initial for Approval **	Name of Resource	Website	Privacy Policy
	Project STEM	https://courses.projectst em.org/	
	GMetrix	https://gmetrix.net/	https://www.gmetrix.com/ Home/PrivacyPolicy
	Canva	https://canva.com/	https://www.canva.com/policie s/privacy-policy/

Scratch	https://scratch.mit.edu/	https://scratch.mit.edu/priva cy_policy
Flipgrid	www.flipgrid.com	https://legal.flipgrid.com/priv acy.html
Khan Academy	www.khanacademy.or g	https://www.khanacademy.o rg/about/privacy-policy
MachineLearning4K ids	https://machinelearnin gforkids.co.uk/	https://machinelearningforki ds.co.uk/
Code.org	https://code.org/	https://code.org/privacy
Sphero	https://sphero.com/pag es/educators	https://edu.sphero.com/child -policy
GMetrix	https://gmetrix.net/	https://www.gmetrix.com/Ho me/PrivacyPolicy
Nearpod	https://nearpod.com/	https://nearpod.privacy policy
CodeHS	https://codehs.com/	https://codehs.com/privacy
Trinket	https://trinket.io/	https://trinket.io/privacy
Thunkable	https://thunkable.com/ #/	https://thunkable.com/#/priv acy
edX course	https://www.edx.org/	https://www.edx.org/edx- privacy-policy
Codingbat	https://codingbat.com/ python	https://codingbat.com/privac y.html

VEX code VR	https://vr.vex.com/	https://www.vexrobotics.co m/software-privacy-policy
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\*\* The following resources are web-based resources that require parent permission. By signing the syllabus, the parent is approving these resources. Should you have any questions regarding any of these classroom resources, please contact your student's teacher via email.

**Dress for Success:** Career and technical education pathways in Forsyth County incorporate Dress for Success Days throughout the school year. These experiences allow students to foster confidence and continue to develop a positive self-image, while understanding the importance of dressing well for their future profession. At certain intervals throughout the course, students will analyze industry standards of the profession and study the importance of dressing well for a job interview. This will culminate into being fully prepared for Community Mock Interviews which occur as students complete a career pathway.

**Industry Credentialing/Credentials of Value (EOPA):** Students are encouraged to select a career pathway beginning in the ninth or tenth grade that is connected to college and career goals. This course is one of three courses in the career pathway chosen by a student. At the conclusion of the third pathway course, students will be required to take an industry credentialing assessment. This assessment provides students an opportunity to demonstrate what they have learned by completing an online, nationally recognized exam and allows students the ability to earn a FCS Pathway Medallion and State Career Pathway Diploma Seals upon graduation. Student directory information may be shared with credentialing vendors offering the assessment.

The rigorous/technical coursework that you have been taking or will take in future years will provide you the foundational knowledge you will need for this exam. Your teacher will provide you the testing details and share the study guide and resources that are available to also assist you in preparation for this industry certification exam.

Credential of Value (EOPA) Assessment Name: IT Specialist Software Development
Credential of Value (EOPA) Assessment Vendor: Certiport
Credential of Value (EOPA) Assessment Name: Unity Certified Associate: Game Developer
Credential of Value (EOPA) Assessment Vendor: Unity Technologies
Credential of Value (EOPA) Assessment Name: CIW Site Development Associate
Credential of Value (EOPA) Assessment Vendor: CIW
Credential of Value (EOPA) Assessment Name: AWS Certified Cloud Practitioner - Fundamentals
Credential of Value (EOPA) Assessment Name: AWS



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The full version of the Introduction to Software Technology (IST) course syllabus is available on Ms. Zhou's It's Learning course main page. Please log on your It's Learning account, find the IST syllabus in the RESOURCE folder. Read and sign the return slip below.

I, \_\_\_\_\_\_, have read this course syllabus and approve of its contents. I agree to allow my student to use each of the classroom resources listed in the learning resource section. I will support my student following the classroom expectations outlined in this course syllabus. I agree that I am the person who is legally allowed to consent for my student whose name is listed below.

Student's Name (Print)

Parent's Name (Print)

Parent Signature

Date

\*\* Ms. Zhou is the advisor for **FBLA**, sponsor for SFHS Coding club, Cyberpatriot Competition team at SFHS, American Computer Science League at SFHS, Asian Students Association at SFHS. <u>All these clubs are extra-curricular and voluntary.</u> If you are interested in joining any of the clubs, please contact Ms.Zhou via her email. All club fee payment links are available on My Payment Plus.