***Lovejoy* High School**

High School Course Syllabus

Web & Digital Design Pathway

**Course Title** **Introduction to Digital Technology** **Term** Yearlong, 2015-16

TEACHER Ms. Walton room #306

|  |  |
| --- | --- |
| Email Address**Teacher Web Page** |  |
| Teacher Support | Help sessions are available …  |

### Course Description

Introduction to Digital Technology is the foundational course for Web & Digital Communications, Programming, Advanced Programming, Information Support & Services, and Network Systems 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 hardware, software, programming, web design, IT support, and networks are all taught in a computer lab with hands-on activities and project-focused tasks. Students will not only understand the concepts, but apply their knowledge to situations and defend their actions/decisions/choices through the knowledge and skills acquired in this course.

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 both the employability skills standards and content standards for this course.

Various forms of technologies will be highlighted to expose students to the emerging technologies impacting the digital world. Professional communication skills and practices, problem-solving, ethical and legal issues, and the impact of effective presentation skills are taught in this course as a foundational knowledge to prepare students to be college and career ready. The knowledge and skills taught in this course build upon each other to form a comprehensive introduction to digital world.

Prerequisites: Introduction to Digital Technology is a course that is appropriate for all high school students. The pre-requisite for this course is advisor approval.

### Course Curriculum Content

**Course Standards**

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| --- | --- |
| **Course Standards** | **Units/Topics** |
| IT-IDT – 1 Demonstrate employability skills required by business and industry IT-IDT - 2 Explore, research, and present findings on positions and career paths in technology and the impact of technology on chosen career area. IT-IDT-3 Demonstrate effective professional communication skills (oral, written, and digital) and practices that enable positive customer relationships. IT-IDT-4 Identify, describe, evaluate, select and use appropriate technology.IT-IDT-5 Understand, communicate, and adapt to a digital world.IT-IDT-6 Explore and explain the basic components of computer networks.IT-IDT-7 Use computational thinking procedures to analyze and solve problems.IT-IDT-8 Create and organize webpages through the use of a variety of web programming design tools.IT-IDT-9 Design, develop, test and implement programs using visual programming.IT-IDT-10 Describe, analyze, develop and follow policies for managing ethical and legal issues in the business world and in a technology-based society.IT-IDT-11 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. | **Semester 1:**1. FBLA – leadership development, community service, and employability skills
2. Online safety and digital citizenship
3. Emerging and future technology
4. Hardware and software
5. Problem solving, flowcharting and algorithms
6. Visual programming
7. Employability Skills
8. Information Technology Careers: Programming, Gaming, and Software Development

**Semester 2:**1. FBLA – entrepreneurship development, competitive events, professional communication
2. Operating systems
3. Customer relationships
4. Networking basics
5. Online resources
6. Web design
7. Ethics, legal issues, and cyber security
8. Information Technology Careers: Network Systems, Information Support & Services, and Web & Digital Communications, Computer Forensics
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### Instructional Materials and Supplies

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| --- | --- |
| **Published Materials** | **Instructional Supplies** |
| Discovering ComputersDiscovering Computers Online Companion | 3-ring binder, paper, pen or pencil, headphones |

**Evaluation and Grading**

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| --- | --- | --- |
| **Assignments** | **Grade Weights** | **Grading Scale** |
| Classwork & HomeworkProjectsUnit TestsQuizzesFinal Exam | Class (Daily Work) 20%Final Exams 25%Homework/Business Ethics 15%Projects 20%Quizzes 10%Test 20% | A: 90 and aboveB: 80 – 89C: 74 – 79D: 70 – 73F: 69 or below |

**Other Information**

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| --- | --- |
| **Expectations for Academic Success** | **Additional Requirements/Resources** |
| 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
 | * Acceptable Computer Use Policy
* Tutoring Available
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**Pathway Career Opportunities**

|  |  |
| --- | --- |
| •    Web Designer•    Game Artist•    Character Animator•    Lighting Artist•    Effects Designer | •    Character Modeler•    Multimedia Web Designer•    Creative Director•    Interface Designer |

**End of Pathway Assessment: w3schools HTML Certification** [**www.w3schools.com**](http://www.w3schools.com)

**Georgia Professional Standards**

**Support of CTAE Foundation Course Standards and Common Core GPS and Georgia**

**Performance Standards**

**L9-10RST 1-10** and **L9-10WHST 1-10:** Common Core ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses. Additional Common Core GPS for Speaking and Listening are listed in the foundational standards below.

**ELACC9-10SL1:** Initiate and participate effectively in a range of collaborative discussions (one- on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others’ ideas and expressing their own clearly and persuasively.

**ELACC9-10SL2:** Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.

**ELACC9-10SL4:** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

**ELACC9-10SL5:** Make strategic use of digital media (e.g., textual, graphical, audio, visual, and interactive elements) in presentations to enhance understanding of findings, reasoning, and evidence and to add interest.

**Projects**

**Semester 1:**

* **Evolution of Technology Timeline**
* **Engineering Project-Build A Vending Machine**
* **Halloween/Fall Game in PPT**
* **Scratch Programming-Create An Animated Story**
* **Career Portfolio**

**Semester 2:**

* **Build A Computer**
* **The Lemonade Stand Project**
* **Create A Webpage**
* **CSI: The experience**

**FBLA Integration**

**September Scavenger Hunt**

**October FBLA T-Shirt Competition**

**November Create Your Own Organization**

**December FBLA Recruitment Brochure**

**January FBLA Research**

**February FBLA Flyer**

**March FBLA Competition Presentation**

*The syllabus may be updated as needed throughout the semester.*