105

PROGRAMMING 105

Introduction to Web Development with JavaScript

Instructional Model:

Teacher Led
Engaged Learning
Project Based Lessons

Course Category:

Programming

Minimum Grade Level: 5th Grade

Prerequisites:

Programming 101 or comparable experience

Programming Language:

JavaScript
HTML
CSS

Software used in Course:

Brackets Google Chrome Repl.it

Technology Options:

Mac Windows Chromebook

COURSE DESCRIPTION

Students use Javascript, HTML, and CSS to gain familiarity with web-page structure and front-end web design best practices. Educators lead discussions that explore various STEM careers and project-based activities that encourage students' interests in web development.

STANDARDS COMPLIANCE

- 100% national and state computer science standards alignment - standards map provided
- Reinforces Math, ELA, and Social-Emotional Learning competencies

STUDENT OUTCOMES

Each lesson plan is designed to achieve specific student outcomes related to computer science competencies.

Sample outcomes for this course include:

- Utilize the hierarchy of HTML to learn the basics of web page content.
- Identify and explain how to deal with suspicious websites through discussions with classmates.
- Understand variables and data types when designing websites.
- Utilize the basics of JavaScript to build interactive web page content.
- Apply software planning concepts.
- Understand the role and career of a web designer through discussions with their classmates.



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RESOURCES INCLUDED

- Teacher Training videos
- Summative Assessments
- Formative Assessments
- Syllabus
- Computer science standards compliance mapping
- Full year of step-by-step lesson plans
- Pacing guide

- Vocabulary words and definitions
- Coding activities
- Unplugged activities
- Digital citizenship activities
- Hardware activities (Optional)

PILLARS OF ENGAGMENT



CODING visual

Codelicious engages visual learners with computer-based projects, vocabulary activities, aswell as written and visual imagery, while building foundational and advanced computer science skills.



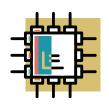
DIGITAL CITIZENSHIP auditory

With discussions, collaboration sessions, and student presentations, Codelicious provides computer science curriculum that enables the auditory learner to thrive.



UNPLUGGED kinesthtic

Designed to be conducted off-line with creative activities or movement, Codelicious leverages unplugged activities to reinforce computer science concepts.



HARDWARE tactile

Hands-on learning with Codelicious curriculum builds upon computer science principles through hardware projects, problem solving activities involving everyday materials, and real-world applications.

