



# 3rd Grade Digital Literacy & AI Course Syllabus

## One Year for Elementary School, 26 Hours

### Course Overview and Goals

The **Digital Literacy & AI Course** introduces students to essential digital skills and foundational computer science concepts needed to thrive in today's technology-driven world. Throughout the course, students build problem-solving skills and responsible technology practices while engaging in hands-on activities and real-world applications. They will develop an understanding of artificial intelligence, digital tools, online safety, and emerging technologies, building a strong foundation in digital literacy. This flexible course can be taught in any order to meet the needs of diverse classrooms.

**Learning Environment:** This course is designed to be teacher-led, with ready-to-use lesson plans that follow a structured format: **Introduction, Guided Practice, Independent Practice, Extension, and Reflection**. Lessons are built with spiral review to reinforce key concepts and culminate in engaging projects to showcase student understanding.

The lessons are delivered in an **"I do, we do, you do"** format, ensuring a gradual release of responsibility and fostering confidence in students as they learn. Teachers can adapt the content to fit their schedule and instructional needs. The concepts taught in this course spiral across grade levels, ensuring that students can revisit and build upon their understanding year after year, even if all lessons are not completed within a single year. The course includes a total of **26 lessons**, each approximately 45 minutes long.

**Programming Environment:** Students will write and run programs that are saved in students' accounts. The environment supports interactive, hands-on programming, enabling students to create and debug projects in a user-friendly interface.

**Prerequisites:** There are no prerequisites for this course. It is designed to support all learners, regardless of prior computer science experience.

**More Information:** Browse the content of this course at <https://codehs.com/course/28006/explore>



A clickable PDF can be found at [https://codehs.com/DigLit\\_Roadmap](https://codehs.com/DigLit_Roadmap)

## Course Breakdown

### Unit 1: Getting Started (2 lessons)

In this module, students learn to log in and navigate the CodeHop Playground and are introduced to basic programming concepts to create interactive scenes with characters.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Log in and navigate the CodeHop Playground independently.</li><li>● Explore the programming interface to create a simple programmed scene with characters.</li></ul>
Lessons	<p><b>Welcome to CodeHop!</b></p> <ul style="list-style-type: none"><li>● Learn how to log in and use the CodeHop Playground. This short introductory lesson can be used on its own, or right before a full lesson.</li></ul> <p><b>Introduction to Computer Science</b></p> <ul style="list-style-type: none"><li>● Define important computer science vocabulary and create a simple program.</li></ul>

### Unit 2: Computing & Society (8 lessons)

In this module, students explore how technology influences culture, examine careers that use computing, and develop digital responsibility skills by learning about online safety, screen balance, digital etiquette, digital footprints, and cyberbullying.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Explain how technology and culture influence each other.</li><li>● Create projects demonstrating technology's impact and innovation.</li><li>● Describe how computing is used in health and fitness careers.</li><li>● Practice safe and responsible online behavior.</li><li>● Explain digital etiquette, digital footprints, and how to report cyberbullying.</li></ul>
Lessons	<p><b>Impacts of Computing: Introduction</b></p> <ul style="list-style-type: none"><li>● Explain how technology and culture influence each other and create a project showing a past technology, its present version, and an improvement idea.</li></ul> <p><b>Technology Timeline</b></p> <ul style="list-style-type: none"><li>● Create an interactive timeline to illustrate the key developments in music player technology and explain how music player technology has influenced cultural practices.</li></ul> <p><b>Careers in CS: Health and Fitness</b></p> <ul style="list-style-type: none"><li>● Explain how fitness and coding can amplify human strengths and create an animation to demonstrate how technology can be used in health and fitness.</li></ul> <p><b>Digital Responsibility: Getting Started</b></p> <ul style="list-style-type: none"><li>● Explain how to stay safe and make good choices online.</li></ul> <p><b>My Screen Balance Plan</b></p> <ul style="list-style-type: none"><li>● Define screen time and balance, develop healthy technology routines, and write an opinion piece on the most important rule for health and safety.</li></ul> <p><b>Introduction to Digital Etiquette and Communication (2 classes)</b></p> <ul style="list-style-type: none"><li>● Explain digital etiquette and communication.</li></ul> <p><b>Digital Footprint Basics</b></p> <ul style="list-style-type: none"><li>● Describe safe and unsafe online behaviors and explain how those choices affect a digital footprint.</li></ul> <p><b>Spotting Cyberbullying</b></p> <ul style="list-style-type: none"><li>● Identify cyberbullying and explain how to report it.</li></ul>

### Unit 3: Research & Attribution (1 lesson)

In this module, students learn how to search for information online effectively and give proper credit to the sources they use.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Search for information online and identify reliable sources.</li><li>● Provide proper attribution.</li></ul>
Lessons	<b>What Can I Use Online?</b> <ul style="list-style-type: none"><li>● Search for information to answer questions online and provide proper attribution to sources.</li></ul>

### Unit 4: Systems & Security (3 lessons)

In this module, students learn about computing systems, how devices communicate over networks, and the basics of cybersecurity to understand how technology works and how to stay safe online.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Identify parts of a computing system.</li><li>● Explain how data travels across a network.</li><li>● Recognize common cyber threats and safety practices.</li></ul>
Lessons	<b>Introduction to Computing Systems</b> <ul style="list-style-type: none"><li>● Identify parts of the computing system and solve simple hardware and software problems.</li></ul> <b>Modeling Network Connections</b> <ul style="list-style-type: none"><li>● Describe how messages move between devices using a network and create a program that shows how data travels from one device to another.</li></ul> <b>Cybersecurity Introduction</b> <ul style="list-style-type: none"><li>● Understand basic cybersecurity concepts, identify common cyber threats, and explain practical tips for staying safe online.</li></ul>

### Unit 5: Productivity Tools (5 lessons)

In this module, students explore productivity software by selecting appropriate tools for tasks, practicing digital collaboration, and creating documents, presentations, and spreadsheets to organize and share information.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Choose appropriate software for a task.</li><li>● Demonstrate digital collaboration.</li><li>● Create and edit a document.</li><li>● Build a simple presentation.</li><li>● Enter and organize data in a spreadsheet.</li></ul>
Lessons	<b>Introduction to Productivity Software</b> <ul style="list-style-type: none"><li>● Compare and select appropriate software applications to complete different computing tasks.</li></ul> <b>Introduction to Digital Collaboration</b> <ul style="list-style-type: none"><li>● Explain and demonstrate digital collaboration.</li></ul> <b>Introduction to Google Slides™ or Introduction to Microsoft PowerPoint™</b> <ul style="list-style-type: none"><li>● Create an “All About Me” presentation.</li></ul> <b>Introduction to Google Sheets™ or Introduction to Microsoft Excel™</b> <ul style="list-style-type: none"><li>● Enter, organize, and visualize data in a spreadsheet.</li></ul> <b>Introduction to Microsoft Word™ or Introduction to Google Docs™</b> <ul style="list-style-type: none"><li>● Make edits in the word processing application.</li></ul>

### Unit 6: Data & Analysis (3 lessons)

In this module, students evaluate and analyze data to draw conclusions and make predictions, learn how digital data is stored and managed, and complete an inquiry project by modifying a program to display survey results.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Evaluate and analyze data.</li><li>● Draw conclusions and make predictions.</li><li>● Explain how digital data is stored.</li><li>● Modify a program to display results.</li></ul>
Lessons	<p><b>Data Detectives</b></p> <ul style="list-style-type: none"><li>● Evaluate data for reliability and then analyze the data to draw conclusions and make predictions.</li></ul> <p><b>File Management and Data</b></p> <ul style="list-style-type: none"><li>● Explain that different types of digital data take up different amounts of space, and identify where digital data can be stored.</li></ul> <p><b>Inquiry Project: Survey Bar Graph (2 classes)</b></p> <ul style="list-style-type: none"><li>● Follow the inquiry process and modify a program to display the results of their investigation.</li></ul>

### Unit 7: Artificial Intelligence (3 lessons)

In this module, students compare human and computer abilities, explore how AI models improve with training data, and examine why people design and build intelligent technologies.

Objectives / Topics Covered	<ul style="list-style-type: none"><li>● Compare human and computer abilities.</li><li>● Explain limits of technology.</li><li>● Describe how AI learns from data.</li><li>● Discuss why smart machines are created.</li></ul>
Lessons	<p><b>Humans Vs. Machines</b></p> <ul style="list-style-type: none"><li>● Compare and contrast human and computer performance on similar tasks, explain advantages and limitations of technology, and describe computer perception.</li></ul> <p><b>Introduction to Training AI</b></p> <ul style="list-style-type: none"><li>● Investigate how AI models can evolve when new data is added to a training set.</li></ul> <p><b>Creating Smart Machines</b></p> <ul style="list-style-type: none"><li>● Examine why people design and build computing technologies, including AI.</li></ul>

## 3rd Grade Course Supplemental Materials

Resources	Description
<a href="#">Parent Welcome Letter (Spanish)</a>	Send this letter home to introduce families to their new computer science curriculum.
<a href="#">Warm-Up Activities</a>	This warm-up activity slide deck provides 5-10 minute problems aligned with computer science skills to engage students at the start of class, allowing teachers to preview or review concepts with answer keys and discussion tips included in the Speaker Notes.
<a href="#">Program Self-Assessment (Spanish)</a>	This is a student self-assessment tool designed to help K-6 learners reflect on their programming projects, evaluate their skills in algorithms, debugging, collaboration, and reflection, and set goals for improvement.
<a href="#">Peer Review Resources</a>	This provides structured worksheets to facilitate student feedback during

<a href="#">(Spanish)</a>	collaborative coding projects. It encourages reflection by guiding students to highlight successes, ask questions, and offer constructive feedback on their partner's work.
<a href="#">Lesson Reflection &amp; Computational Thinking (Spanish)</a>	This guides students in engaging with computational thinking concepts, preparing for discussions, reflecting on lessons, and applying their learning to real-world problem-solving.
<a href="#">Design-Your-Own-Lesson Templates</a>	Empower your students to explore and express their knowledge creatively with our versatile graphic organizer templates. Designed with adaptability and ease of use in mind, these interactive tools transform any subject into an engaging, hands-on learning experience.
<p style="text-align: center;">These resources and more are found on the <a href="#">CodeHop Resources Page</a>.</p>	