

Digital Citizenship 8th Grade Course Syllabus

Middle School, 18 Hours

Course Overview and Goals

Digital Citizenship 8th Grade introduces students to responsible and informed technology use through engaging, real-world learning experiences. Students strengthen critical thinking and problem-solving skills as they learn to protect personal data, recognize online threats, evaluate digital information, and understand how technology shapes communication, relationships, and communities.

By the end of the course, students are prepared to navigate connected spaces confidently, make safe and ethical choices, and contribute positively as thoughtful digital citizens.

Learning Environment

The course utilizes a blended classroom approach. The content is a mix of web-based and physical activities. The modules in this course are broken down into lessons. Lessons are composed of short video tutorials, interactive learning pages, quizzes, explorations, and free-response prompts.

Prerequisites

Digital Citizenship 8th Grade is designed for students with little to no prior experience in computer science.

More Information

Browse the content of this course at <https://codehs.com/course/28052/overview>.

Course Breakdown

Module 1: Cybersecurity and You (2 weeks/10 hours)

In this module, students explore key areas such as personal data collection, the reliability of online information, cyber ethics and laws, personal data security, cybersecurity essentials, and strategies to combat common cyber threats and their prevention, equipping individuals with the knowledge to navigate the digital landscape responsibly and securely.

Browse the full content of this unit at <https://codehs.com/course/28052/explore/module/40351>

Topics Covered	<ul style="list-style-type: none">● Digital Footprint and Responsibility● Personal Data Collection and Security● Cyber Ethics and Laws
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	<ul style="list-style-type: none"> ● Cybersecurity Essentials ● Common Cyber Attacks and Prevention
Example Assignments	<ul style="list-style-type: none"> ● Digital Footprint and Responsibility <ul style="list-style-type: none"> ○ Students explore the impact of social media and technology on teenagers, covering topics like digital footprints, the rise of social media screenings, cyberbullying, and the importance of updating privacy settings. ● Personal Data Collection and Security <ul style="list-style-type: none"> ○ This lesson delves into the use and security of personal data, discussing how companies like Google utilize user information, the implications of location tracking, and legal aspects of privacy, and encourages critical thinking through reflections, checks for understanding, and explorations of browser security settings and the trade-offs of security measures. ● Cyber Ethics and Laws <ul style="list-style-type: none"> ○ This lesson navigates through cyber ethics, differentiating between ethics and laws, exploring legal consequences, copyright in education, the process of obtaining permissions, and the pros and cons of intellectual property laws. ● Cybersecurity Essentials <ul style="list-style-type: none"> ○ This lesson covers cybersecurity, featuring activities on the AAA Security Framework and the CIA Triad, along with exploring the impact of the Internet of Things on data security.

Module 2: Technology and Society (1.5 weeks/8 hours)

In this module, students examine how the internet and digital technologies impact various aspects of modern life, from personal behavior to global communication. Through readings, reflections, and interactive routines, learners explore both the benefits and challenges of a digitally connected world.

Browse the full content of this unit at <https://codehs.com/course/28052/explore/module/40352>

Topics Covered	<ul style="list-style-type: none"> ● Impact of the Internet on Society ● Ethical and Social Implications of Technology ● Modeling and Designing Embedded Systems ● Data as a Valuable Resource ● Understanding Human vs. Artificial Intelligence
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Example Assignments	<ul style="list-style-type: none">● Symmetric Encryption<ul style="list-style-type: none">○ <i>Rail Fence Cipher</i>: The Rail Fence Cipher is a form of transposition cipher that uses columns and rows. The plaintext is written downwards and bounces back and forth on a diagonal. The 'rails' refer to the number of rows. Decrypt the message below using 5 rails. Using the Rail Fence Cipher, encrypt your own message and trade with a partner. See if you can decrypt the message without knowing how many rails your partner used. How could you make this cipher even stronger?● Asymmetric Encryption<ul style="list-style-type: none">○ <i>Public Key Encryption Exploration</i>: You would like to send a message to your friend. Your friend will need a private key as well to add to the encryption. Complete the chart according to the rules of the public key and the two private keys.● Authentication Methods<ul style="list-style-type: none">○ <i>Guess The Hash</i>: Work with a partner and take turns hiding a password, and trying to guess the password. Without letting your partner see, type in a simple word (about 3-7 letters long) as your password. You'll see the corresponding hash in the output box. Using the scrambled letters, attempt to guess the password. You will only know if you have guessed the password if the hashes shown match.
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