

Introduction to Computer Science

Instructor: Chad LeDune

Room: 316

Contact information: cladune@swest.k12.in.us

Course Number: DOE Code 4803

Course Description:

Introduction to Computer Science provides an entry point into computer science. Through computational thinking and collaboration, students will learn the skills and processes needed to develop computer artifacts, basic coding. Data, security and intellectual property will also be explored. Students will develop an understanding of how computer science impacts their everyday lives and explore a variety of careers in the computer science field.

Recommended Grade Level: Grade 9

Recommended Prerequisites: None

Credits: 1 or 2 semester course, 1 credit per semester, 2 credit maximum

Counts as a Directed Elective or Elective for all diplomas

Indiana's Five Core Computer Science Concepts:

- Data and Information
- Computing Devices and Systems
- Programs and Algorithms
- Networking and Communication
- Impact and Culture

National Core Computer Science Practices from the CS Framework:

- Fostering an Inclusive Computing Culture
- Collaborating Around Computing
- Recognizing and Defining Computational Problems
- Developing and Using Abstractions
- Creating Computational Artifacts
- Testing and Refining Computational Artifacts
- Communicating About Computing

Technology/Software used in Class;

- CodeCombat
- Khan Computer Science
- TinkerCAD DesignBlock
- Pixar Animation Coding
- Code.org
- Google CS First
- Arduino

Projects Completed during 2 Semester Course;

- 4 grade period CodeCombat goals
- 4 grade period Khan Computer Science goals
- 4 grade period TinkerCAD DesignBlock goals
- 4 grade period Pixar Animation goals
- 4 grade period Code.org goals
- 4 grade period Google CS First goals
- 4 grade period Arduino projects
- 1 year-long CS Student Choice project

Grading and Evaluation:

Students are graded on the Southwest School Corporation adopted grading scale;

A = 100-93%

A- = 92-90%

B+ = 89-87%

B = 86-83%

B- = 82-80%

C+ = 79-77%

C = 76-73%

C- = 72-70%

D+ = 69-67%

D = 66-63%

D- = 62-60%

F = 59-0%