COMPUTERS AND AI IN SCIENCE

Mondays, September 8 -December 8 (no class Oct 13 and Nov 24; 12 weeks)
9:30am -11:00am
Ages 11-14

Students develop the foundational tech and critical thinking skills used by scientists as they explore how technology supports real-world scientific discovery. In addition to data input and visualization, online research, and scientific presentation creation, students are introduced to artificial intelligence and critically evaluate AI-generated content. All lab costs are included in the registration fee. Students must bring a laptop each week.

Instructor: Ashley Blocker, BSc
Location: STEM Lab (Suite 21)
Full semester - $275 OR $25/lab (plus $0.99 AH fee)
10% off sibling discount
Register for full semester or individual labs.

LAB SCHEDULE:

COMPUTERS IN SCIENCE - Monday, September 8

Students explore real-world examples of how computers are used in science - data analysis, modeling ecosystems, exploring space, and running experiments. They'll take a tech "lab tour" to learn about hardware, software, and digital tools used in research.

TYPING FOUNDATIONS - Monday, September 15

Students focus on improving touch typing using real science vocabulary (e.g., gravity, organism, hypothesis). Starting this week, students complete weekly speed tests and track progress, mirroring how scientists measure results over time.

DATA INPUT - Monday, September 22

Just as scientists organize data in spreadsheets, students use functions and keyboard shortcuts to enter, label and sort scientific data.

RECORDING OBSERVATIONS - Monday, September 29

Students simulate recording lab notes and scientific observations from digital experiments or simulations, practicing punctuation, clarity, and organizing their thoughts like researchers.

DISCOVER SCIENCE CENTER

DIGITAL SCIENCE NOTEBOOK - Monday, October 6

Using word processors like Google Docs or Word, students create a formatted digital science notebook, complete with headings, bullet points, tables, and inserted images or graphs.

ORGANIZING DATA - Monday, October 20

Students learn how to organize their files and folders like a research lab. They practice naming conventions, version control, and storing their work in logical, searchable formats.

ONLINE RESEARCH - Monday, October 27

Students identify credible sources, evaluate websites, search efficiently using keywords and filters, and compile science facts into a brief digital research report.

DATA VISUALIZATION - Monday, November 3

In this class, students collect or use sample data sets and use spreadsheet tools to organize data, create charts, and analyze trends—practicing real-world STEM skills.

SCIENTIFIC PRESENTATIONS - Monday, November 10

Students create digital slide decks (in Google Slides or PowerPoint) to present a scientific topic. They learn to organize information, use visuals, and prepare to present to an audience.

AI TRAINING - Monday, November 17

This week, students use Google's Teachable Machine to train a computer to recognize images, providing a hands-on introduction to artificial intelligence concepts.

AI RESEARCH - Monday, December 1

Students learn how to effectively use AI for researching an area of interest and verifying the content with reliable resources.

AI TRUE OR FALSE - Monday, December 8

We test the accuracy of AI-generated information to explore its strengths, limitations, and best-use practices.