

Purple Room Computer Lab Curriculum

Computer Lab Teacher: Christine Guseman

2019-20 Themes:

Using Technology to Build Communities:

- How do we use technology to solve the problems we see around us in our community?
What technology is used to design, plan, engineer, and create a community?

Exploring New Technologies:

- This year students will be encouraged to explore technology beyond computers in order to learn how to create new things and learn technical skills

The overall goals are to introduce students to use and increase their proficiency with:

- Computer use and etiquette
- Computer Maintenance and Organization of Files (document, image, etc)
- Touch Typing*
- Web Browsers and Search Engines
- G Suite for Education
 - Google Classroom
 - Word Processing
 - Spreadsheet
 - Presentation
 - Forms
 - Web Sites
- Video Design (using either Movie Maker and/or Animoto)
- Photo manipulation software and scanning technology
- Publishing software
- Webpage design

For all Grade levels, there will be a focus on the following skills:

- Responsible and well-organized saving of documents and drafts, by ensuring that all files are well named, well organized, and located in multiple places
- Communicating responsibly using computers
- Internet for Research and critical thinking about resources
- Using technology to solve problems and make informed decisions
- Ethical and safe uses of the internet
 - Internet safety
 - Chat safety
 - E-mail etiquette

Purple Room Specific goals:

- reinforce effective organization and maintenance of student computer files
- reinforce proper and effective touch-typing skills
- reinforce basic word processing (Google Docs) skills and introduce more advanced skills

- reinforce basic spreadsheet (Google Sheets) skills and introduce more advanced skills
- reinforce slide presentation (Google Slides) skills and introduce more advanced skills
- use Google Classroom as the classroom learning management platform for: submitting assignments, receiving feedback and communicating with the class.

Purple Rooms Computer Lab Skills

Students will be able to:

General Skills

- Name their files properly.
- Save their files in the proper subfolder in their folder on the Z-drive and Google Drive
- Locate their files in their folder on the Z-drive and Google Drive
- Print their files, or portions of their files, single sided or double sided
- Touch type at least 30-35 wpm
- Properly subject and send emails

Google Docs

- Open Google Docs and create a document
- Change a font style and size
- Apply special formatting (bold, underline, small caps, drop caps)
- Select and change line spacing
- Indent the first line of a paragraph using the Paragraph menu
- Center, left justify, or right justify a line
- Select paragraph spacing
- Insert a picture and have the text wrap around it
- Insert a text box
- Format a document for columns

Google Sheets

- Open Google Sheets and create a document
- Create a basic equation using +, -, *, /
- Create a text table and use borders
- Create a table with numbers and include column headings and column totals
- Create a chart, and include a chart title, axis titles, and a legend
- Use Google Sheets to organize sets of data

Google Slides

- Open Google Slides and create a presentation with multiple slides
- Insert pictures and shapes
- Insert hyperlinks with proper navigation
- Apply layouts and different backgrounds

- Format text, selecting size, color, and font
- Insert a text box
- Use animation

Additional Software

- Use a reference website to create a bibliography

The following will be included as time allows based on student interests:

Additional Softwares and Programs:

- Introduction to coding and programming languages
- Introduction to 3D modeling software for use in animation or 3D printing
- Introduction to digital art software and animation
- Introduction to video and digital game design

Additional Hardware:

- Overview of computer parts (harddrive, motherboards, RAM, etc)
- Overview of computer peripherals (USBs, keyboards, monitors, etc)
- Introduction to robotics
- Introduction to sensors
- Introduction to other electronic systems (Arduino, Raspberry Pi, etc)