

COMPUTER SCIENCE & APPLICATIONS SYLLABUS

ACADEMY OF ARTS, CAREERS & TECHNOLOGY INSTRUCTOR: RACHEL ROBINSON

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Location: AACT Room 109

Website: <https://sites.google.com/site/rrobinsonarts/home?authuser=0>

COMPUTER SCIENCE & APPLICATIONS - Students will have opportunities to learn **industry standard skills** such as:

- How to access and use Microsoft Office Suite of Software
- Some Basics of Photoshop for design and layout of flyers and posters
- Some tools of Illustrator - Understanding use of vectors
- Understanding and using different file formats for output devices such as web, color printing, email, 3D printing, material cutting devices, laser cutting, vinyl cutting, or laser output
- Introduction to Basic Web Page Design
- Introduction to HTML and/or possibly basic coding language
- Ethical standards of using technology and understanding how social media & Bots are used to create social movements
- Thinking ahead; understanding the future of what technology may be
- Basics of working in 3D
- Neuroscience of learning
- Design basics and the psychology of color; how it is used to influence
- Overview of careers in technology, cyber security, game design etc.

All assignments build on each other and reinforce what was previously learned.

SOFTWARE:

The software we work with will be the current industry version of Microsoft products, Corel Painter, Adobe Photoshop, and Adobe Illustrator. Students will gain an understanding of the similarities and differences of these programs. Students will be able to access lectures, tutorials, and required reading online and in Microsoft Teams. All students, including full distance learners, will also access my website for lessons, videos, important links and examples at:

<https://sites.google.com/site/rrobinsonarts/>

GRADING:

- Work will be graded on a rubric for every assignment.

- Students will be responsible for completing all work. Work that is lost has to be redone to be graded. Therefore, students will be responsible for saving work correctly every day to **all 3** of the following:
 - a. Student's school online Microsoft OneDrive
 - b. Personal flash drive and
 - c. Student or school computer
- Students will post finished work to their websites when completed for grading *and* to Teams drop box.
- Posting final work to a student website allows for
 - a. Both the parent and the student to be involved in viewing completed work for discussion
 - b. The student to have a working portfolio of work for when they graduate to go on to work and internships outside the school district
 - c. A web portfolio to use for student senior presentations.
- Mrs Robinson will allow students to improve a posted grade by reworking projects, however, all work must be finished by the end of the semester *prior* to finals and final grading.
- Students must send me a link update with every assignment so I know the assignment is ready for grading.

All students will be accessing all materials online

DISTANCE LEARNING:

This is still developing because AACT is different from other schools in that teachers at AACT are doing in class and distance teaching at the same time. Here are the expectations:

1. All students will log on to Teams every day that they have class and fill out the Check In Form. It is important that students fill out the whole form so I know what to cover if you need help.
2. Students doing distance learning will also log into zoom every day and participate/work with the class and ask questions as the teacher teaches.
3. Mrs. Robinson will also be uploading tutorials and instructions **for all classes both to teams** and to her website so every student whether online or in person can access these and watch them before they come to class so we can use class time for getting help, review and working. This will come in handy if we go back to quarantine; the same procedures will be in place.

OVERVIEW OF ASSIGNMENTS

* This is a living document. Assignments may change based on student progress, student level of understanding, student needs, and possible fluctuation of school days.

- Creating several backups of work - how to protect your work when equipment fails
- Learning Microsoft Office Suite of Software
- Introduction to Corel Painter for symmetry drawing and color
- Design basics and the psychology of color; how it is used to influence
- Introduction to Basic Web Page Design
- Basics of Photoshop for design, image manipulation & layout
- Creating a Banner for your Website
- Some tools of Illustrator learning about Vectors
- Introduction to coding
- Introduction to HTML
- Basics of working in 3D (if we have time)
- Overview of Careers in technology

For distance and in-class learning, students will use Microsoft Teams and teacher webpage to get assignments and support videos, reading and other items.

<https://sites.google.com/site/rrobinsonarts/>

* Students will have the great opportunity to work with a wide range of digital equipment in the lab. Each student assumes responsibility for all the equipment they use. Each day students need to check the equipment they use and notify the teacher at the start of the period if equipment is changed, damaged, or not working. Each student assumes financial responsibility for equipment. They will be required to buy a new one if damage is due to the individual's misuse, and not due to regular wear and tear.