

## **COMPUTER EXPLORATIONS AND COMMUNICATIONS 31G - CEC31G** **Recommended prerequisite CAW15G / ICT15F or CAT20S**

This course is designed for the student who wishes to further their computer skills and utilize them in a practical setting. Students will develop skills in troubleshooting software and repairing hardware. This is a hands-on technical approach to learning the inner working of a computer. Students will learn how computers and other technologies can be used to create products, as well as enhance life. The practical component of this course is extended as students apply what they have learned in a school or work setting. A considerable amount of class time will be in a school, place of business, or other location as students train others, troubleshoot software, or repair hardware problems. Communication will be a constant and important component throughout the course. To enroll in this course the student should be an active listener and reader, and an excellent independent worker. Students must have successfully completed Computer Awareness 15G or Computer Applications 20S to be enrolled in this course.

Specific topics include:

- Development of computing devices, past, present and future
- The "guts"; power supplies, hard drives, memory, video, processors, motherboards
- Assembly and disassembly of a computer
- Operating Systems; Windows, DOS, Linux, Mac
- Operating System diagnostics and trouble shooting
- Networking; setup and troubleshooting
- New and upcoming technologies
- Topics of interest to the class

Mark breakdown will be as follows:

Daily assignments	- 40%
Projects	- 40%
Final Project(s)	- 20%

Process:

Using computer hardware, this hands-on course will allow students to learn about the inner workings of the computer.

Other resources as outlined on the school webpage, and supplemental articles and news items relating to technology.

Successful students will exit with a better understanding of the computer in terms of its physical hardware, and software drivers / operating systems, and diagnosing and fixing computer electrical and peripheral problems.