

COMPUTER SCIENCE 110
FINAL PROJECT OUTLINE - FALL 2015



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PROJECT DESCRIPTION:

MVHS has been working with a group called Brilliant Labs to do a variety of technology projects. Brilliant Labs is a group that enables teachers to undertake creative, innovative and entrepreneurial projects in the classroom. Last year, we took on the 'Underwater Robots on the Miramichi' project that allowed students an opportunity to explore aquatic environments with an OpenROV robot. As well, MVHS has established a variety of other technologies and will launch their new MakerSpace room this Fall. These technologies include: OpenROV & MATE Robotics, Oculus Rift, GoPro Videography, Sparkfun Electronics, Parrot Drones, Raspberry Pi, Printrobot 3D Printing, Makey Makey and Singer Embroidery. We are also planning to have other technologies included within the lab.

The final project of this course is designed to apply the 4 C's...Creativity, Critical Thinking & Problem Solving, Collaboration, and Communication. These skills are beneficial in any workplace and are essential for life-long learning. The goal of the project is to improve these skills so they can be used in any of your future endeavours. This project takes the place of an exam and will be valued at 25 % of your overall mark.

There are number of components within the project that must be accomplished which include:

- Become familiar with the technology through online resources.
- Familiarize yourself with the technology and learn the skills involved in using the device.
- Apply principles of project management.
- Document the learning experience through a journal.
- Gain 'TechPoints' by submitting activities that promote the learning experience.
- Present your findings to an audience.
- Submit a video summary of the project.

PROJECT COMPONENTS:

Completion of a student project is a requirement for this course. The four components of the project are...

Part I: Documentation (20 %)

- Submit a project proposal that outlines your ideas.
- Submit journal entries that document the project.
- Develop checkpoints to organize the project.

Part II: TechPoint Activities (20 %)

- Complete a choice of optional activities that demonstrate the following three components:
 - Promotion of the project
 - Exploration of the project
 - Advancement of the project
- A maximum of 100 TechPoints may be accumulated (50 of which will be due Nov. 12th).
- Accumulation of these points will be done on an inventory sheet.

Part III: Presentation (30 %)

- Develop an engaging presentation for the class about your role with the project and summarize your learning experience.
 - Visuals should be included (graphs, pictures, videos, etc.).
 - Duration will be 10 - 15 minutes.

Part IV: Video (30 %)

- Develop a video summarizes the project.
 - Include a demonstration of the technology.
 - Highlight the learning experience.
 - Durations will be 5 - 10 minutes.