



Technology 9: Course Outline

Introduction to Robotics @ Yale Secondary School

Platform:
NXT Lego Mindstorms Module



Overview:

Students will be introduced to the highly acclaimed and popular Lego NXT Mindstorms robotics platform. In the course, students will learn how to engineer complex mechanical devices while simultaneously learning how to program the robot to complete a number of tasks and challenges. Students will work together in engineering teams to solve tasks and challenges and compete against other teams in class competitions. The course will integrate core math, science, technology and employability skills needed for successful life long learning

Lab Contract:

Each student will be responsible for reading / understanding and signing the responsibility contract. As this is a class with a substantial amount of lab time, the following rules will apply:

- The group is responsible for collecting and returning the lab equipment to their assigned kit
- Students/teams are responsible for all equipment an/or parts included in the kit
- Students/teams will be charged for lost or broken parts
- Robots must never run on a table. Use the floor or the proper testing board
- Absolutely NO robot demolition derbies
- Turn off the NXT brick when it is not being used (saves battery life)
- Do not interfere with another teams program during lab time
- Do not use a program other than your own without permission from the instructor
- Do not place any unnecessary strain or stress on motors, gears or any parts of your robot
- You are expected to stay on-task and focused during lab time
- Before the room is locked up, make sure ALL equipment is returned and no lego parts are left out
- You must begin cleaning up 10 minutes before the end of class.
- NO food or drinks are allowed in the lab

Teamwork:

This course relies on you being able to function and work collaboratively within a team of students. In addition, you will be expected to act in a mature and professional manner. Students acting inappropriately will not be allowed to participate and may be asked to leave the course.

Contact Information:

Questions? Send me an email at dereck_dirom@sd34.bc.ca

Assessment:

Training Modules	50%
Mini Challenges	30%
Smart House Challenge – Final Project	20%
Total	100%