

Brock University - COSC 4P78 - Robotics - Winter Term, 2019

Instructor: Earl Foxwell

email: efoxwell@brocku.ca

Classes: Tuesdays 1900-2200 in **MCA241**

This course will provide an introduction to robotics, including design, control, sensors and perception, and capabilities and limitations.

Course Materials:

Reference Materials:

Introduction to AI Robotics, Robin, R. Murphy, The MIT Press, 2000

The Robotics Primer, Mataric, 2007

Evaluation:

Labs:	32%
Assignments (2):	20%
Project:	20%
Final Test:	28%

The final test will be written in-class, on March 19th.

Note: to receive a credit for the course, you must meet the following criteria:

- A final grade of at least 40% on the final test
- A final grade of at least 40% on the project
- You must miss **no more** than **one** (1) lab

Course Topics:

- Introduction
- Sensors
- Effectors and Actuators
- Navigation and Path Planning
- Control Systems
- Agents and Multiple Agents

Project:

Students will complete a project. Students are strongly encouraged to consult with the course instructor prior to beginning work on their projects. Additional details will be provided on the course website.

Additional Notes:

- Any physical submissions will only be graded if they include a signed, valid cover page stapled to the front. See the COSC home page to generate a cover page with barcode.
- Please read the department's policy on medical notes on the COSC home page. Other reasons may be used for granting extensions or other accommodations, at the instructor's discretion, but only if the instructor is contacted *in advance* of assignment due dates.
- All assignments will have a firm due date. Late dates will not be assigned, and late submissions will not be accepted.

- Electronic submission of assignments will be required, and programs will be carefully examined for plagiarism. Plagiarism is a serious offense and will be treated accordingly. See <http://www.cosc.brocku.ca/about/policies/plagiarism> for details.
- As part of Brock University's commitment to a respectful work and learning environment, the university will make every reasonable effort to accommodate all members of the university community with disabilities. If you require academic accommodations related to a permanent disability to participate in this course, you are encouraged to contact the Student Development Centre Services for Students with Disabilities (4th Floor Schmon Tower ext. 3240) and also to discuss these accommodations with the instructor.
- March 8th is the last day for voluntary withdrawal without academic penalty. 15% of the final grades will be available to students by March 1st.