

Brock University - COSC 4P78 - Robotics - Winter Term, 2023

Instructor: Earl Foxwell

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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 a take-home exam, at the end of the term.

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
- Vision

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:

- If contacting via email, please include "COSC 4P78" in the **subject** line.
- All official correspondence for this course will be sent to your Brock email address. Please check this account regularly.
- Please familiarize yourself with the university's policies on medical notes. 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 due dates.
- Plagiarism is a serious offense and will be treated accordingly.

1. Please note that distribution of course material outside of Brock University is prohibited, and may constitute both academic *and* non-academic misconduct.
 2. Potential penalties include reduction of grades by more than the weights of the works, zero in the course, and suspension
 3. (Additionally, uploading Brock content anywhere else will result in revocation of Sakai access, as a misuse of computing resources)
- 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.
 - Mar 10th is the last day for voluntary withdrawal without academic penalty, 15% of the final grade will be available to students by Mar 3rd.