
COMP 651: Special Topics in Robotics Syllabus

1 Course Description

This seminar course covers modern topics in robotics. Each semester, we select a theme(s) for discussion. Each week, we review two papers from the literature to discuss. I will occasionally select a paper from yesteryear to provide context. The course website is:

<http://www.clear.rice.edu/comp651/>

2 Prerequisites

There are no prerequisites, although familiarity with fundamental robotics topics such as controls, linear systems, probability, software engineering, artificial intelligence, etc. will help in understanding the papers fully.

3 Topic Overview

The curriculum covers advanced robotic topics from the literature. We focus on these conferences and journals:

1. IEEE International Conference on Robotics and Automation (ICRA)
2. IEEE International Conference on Intelligent Robots and Systems (IROS)
3. Robotics Science and Systems (RSS)
4. Distributed Autonomous Robotic Systems (DARS)
5. Autonomous Agents and Multi-Agent Systems (AAMAS)
6. Workshop on Algorithmic Foundations of Robotics (WAFR)
7. International Symposium on Robotics Research (ISRR)
8. International Symposium on Experimental Robotics (ISER)
9. International Journal of Robotics Research (IJRR)
10. IEEE Transactions on Robotics (T-RO)

4 Text

None.

5 Staff

The course staff and office hours will be posted on the website. Please email questions to the entire staff: engi651-staff@rice.edu. This will ensure the quickest response from the correct person.

6 Meeting Times

Lecture: Wednesday, 1:00-1:50, Duncan Hall 3110.

Office Hours: After class most lectures, Friday 1-2pm. See website for updated hours.

7 Grading

This is a one-unit course. Grading will be based solely on class participation. Each student will be expected to present at least two papers over the semester. If these are well-presented and described, and the ensuing discussion is lively, then this is a good. If the presenter has not read the paper and cannot explain it to the best of their ability, then this is bad. I do not expect a student to understand all of the paper, but I do expect you to explain what you can. There will be no homework, tests, or final.

8 Students with Disabilities

Any student with a documented disability seeking academic adjustments or accommodations is requested to speak with the instructors during the first two weeks of class. All such discussions will remain as confidential as possible. Students with disabilities will also need to contact Disability Support Services in the Allen Center.

9 Miscellaneous

The official course color is Heliotrope: [http://en.wikipedia.org/wiki/Heliotrope_\(color\)](http://en.wikipedia.org/wiki/Heliotrope_(color)), mostly because I like saying it. So did the Jackalope: <http://en.wikipedia.org/wiki/Boundin%27>