

SYSC 4907 – Fall 2026/Winter 2027

Supervisor	Prof. Schwartz
Co-supervisor	Prof. Lambadaris
Course section	SYSC 4907 M
Project ID	M1
Project title	Robot Cooperation and Competition 1
Project description	There are several autonomous vehicles that are available for use in the Arise Laboratory. The goal of this project to have get the robots to form a swarm and cooperatively together or to have some robots act as invaders and others as defenders. The robots are equipped with various sensors, such as Lidar, and there is a motion capture system. The robots will be controlled with Raspberry Pi and Arduino boards. The system will be controlled over a ROS interface.
Program(s)	Computer Systems Software Electrical
Maximum number of students	4
Meeting time with supervisor (optional)	Once per week
Do you want the student to contact you before the office assign this project to them ? (Yes/No)	Yes.

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Supervisor	Prof. Schwartz
Co-supervisor	Prof. Lambadaris
Course section	SYSC 4907 M
Project ID	M2
Project title	Robot Cooperation and Competition 2
Project description	There are several autonomous vehicles that are available for use in the Arise Laboratory. The goal of this project to have get the robots to form a swarm and cooperatively together or to have some robots act as invaders and others as defenders. The robots are equipped with various sensors, such as Lidar, and there is a motion capture system. The robots will be controlled with Raspberry Pi and Arduino boards. The system will be controlled over a ROS interface.
Program(s)	Computer Systems Software Electrical
Maximum number of students	4

Meeting time with supervisor (optional)	Once a week.
Do you want the student to contact you before the office assign this project to them ? (Yes/No)	Yes.