

Date	Week day	Labs	Lectures
August 16	Tuesday		Syllabus, What is a robot, Sense-Plan-Act Paradigm
August 18	Thursday		Intro to Path Planning for Point robots
August 23	Tuesday		Path Planning with Bug Algorithms
August 25	Thursday		Hardware Components and Sensors
August 30	Tuesday		cancelled
September 1	Thursday		cancelled
September 6	Tuesday	No Class: Wellness Day	_____
September 8	Thursday		Wheeled Robots, Ideal Wheel Kinematics, Transformation Matrices
September 13	Tuesday		Differential Drive Forward Kinematics
September 15	Thursday		Bicycle Model, Tricycle Model Kinematics
September 20	Tuesday		Inverse Kinematics, Ackermann Steering
September 22	Thursday	Lego Robots Tutorial	
September 27	Tuesday	Lab 1 Reflection due	Robot Manipulators, Intro to Control
September 29	Thursday	Lab 1: Wheel Kinematics, Robot Sensors	
October 4	Tuesday		PID Controller
October 6	Thursday		Planning: Homotopy, Visibility Graphs
October 11	Tuesday		Planning: Voronoi Diagrams, Trapezoidal Decomposition
October 13	Thursday	Lab 2 Reflection due	Planning : Grid Decomposition, Potential Fields, Optimization
October 18	Tuesday	Lab 2: Wall following	
October 20	Thursday	No Class: Fall Break	_____
October 25	Tuesday		Midterm Exam Preparation
October 27	Thursday		Midterm
November 1	Tuesday		Beyond Point Robots, Degrees of Freedom
November 3	Thursday	Lab 3 Reflection due	Minkowski Sum, Configuration Space
November 8	Tuesday	Lab 3: Dead reckoning	
November 10	Thursday		Planning in Configuration Space
November 15	Tuesday	Lab 4 Reflection due	Probabilistic Roadmaps
November 17	Thursday	Lab 4: Autonomous Navigation	
November 22	Tuesday		Sampling-Based Motion Planning
November 24	Thursday	No Class: Thanksgiving	_____
November 29	Tuesday		Final Exam Preparation
December 3	Saturday		Final Exam