

ECE425 – Mobile Robotics

Course Calendar (Winter 2012 - 2013)

Class	Day	Date	Торіс	Reading	Assignment Due
1-1	М	11/26	Robotics Overview	Ch. 1	Quiz 0
			Lab 1 Recitation – Locomotion and Odometry		
1-2	Т	11/27	The Hierarchical Paradigm	Ch. 2 Niemueller	Quiz 1
1-L	R	11/29	Lab 1 Demonstration – Locomotion and Odometry		Lab 1 Report
2-1	М	12/3	Robot Control	Ch. 3	Quiz 2
2-2	Т	12/4	The Reactive Paradigm	Martin	Quiz 3
2-L	R	12/6	Lab 2 Demonstration – Random Wander, Obstacle Avoidance		Lab 2 Report
3-1	М	12/10	Schema Theory	Ch. 3	Quiz 4
3-2	Т	12/11	Feedback Control	Brooks	Quiz 5
3-L	R	12/13	Lab 3 Demonstration – Wall Following (PD or PI Control)		Lab 3 Report
4-1	М	12/17	Behavior-Based Architecture	Ch. 3	Quiz 6
4-2	Т	12/18	Common Sensing Techniques for Reactive Robots	Arkin	Quiz 7
4-L	R	12/20	Lab 4 Demonstration – Reactive Control – Light		Lab 4 Report
			Sensing		
WINTER BREAK (12/22/12 - 1/6/13)					
5-1	М	1/7	The Hybrid Deliberative/Reactive Paradigm	Ch. 4	Quiz 8
5-2	Т	1/8	Navigation	Mataric	Quiz 9
5-L	R	1/10	Lab 5 Demonstration – Hybrid Control – Homing		Lab 5 Report
6-1	М	1/14	Topological Path Planning	Ch. 4	Quiz 10
6-2	Т	1/15	Metric Path Planning	Grabowski	Quiz 11
6-L	R	1/17	Lab 6 Demonstration – Path Planning		Lab 6 Report
7-1	М	1/21	Map Making	Ch. 4	Quiz 12
7-2	T	1/22	Localization	Ch. 4	Quiz 13
7-3	R	1/24	Final Project		
8-1	М	1/28	Final Project		Quiz 14
8-2	T	1/29	Final Project		
8-3	R	1/31	Final Project		
9-1	М	2/4	Final Project		
9-2	Т	2/5	Final Project		
9-3	R	2/7	Final Project		
10-1	М	2/11	Final Project		
10-2	T	2/12	Competition Dry Run/Seeding		
10-3	R	2/14	Final Project Competition - Kahn Room		Final Project
					Report Due
					Sunday

^{*}This schedule, topics and assignments may be modified at the discretion of the instructor