

ENES 100 Introduction to Engineering Design – Fall 2008
Proposed Schedule of Topics

Date	Day	Topic	Reading Due Dates	Assignment Due Dates
Week 1 9/1 – 9/5	Tuesday Thursday Friday	Introduction / Objectives / Product Specification Project Organization & Management / Product Development Introduction to Hovercraft and Levitation	Chapters 1-2	
Week 2 9/8 – 9/12	Tuesday Thursday Friday	Fluid Mechanics Teamwork Propulsion and fans	Chapter 3	
Week 3 9/15 – 9/19	Tuesday Thursday Friday	Fluid Mechanics • Fan demonstrations Materials Selection / Communications Batteries and driving fans with the NXT (outputs)	Chapter 4.1-4.7	PS 1
Week 4 9/22 – 9/26	Tuesday Thursday Friday	Circuits • Circuit soldering demonstration Project Development Plan Presentation Introduction to the NXT and Sensors	Chapter 6	PS 2 PDPP
Week 5 9/29 – 10/3	Tuesday Thursday Friday	Circuits • Advanced circuitry demonstration NXT Programming – RobotC Hovercraft Dynamics and Control	Chapter 5	PS 3
Week 6 10/6 – 10/10	Tuesday Thursday Friday	NXT Programming – RobotC Sensors & controls • Sensors demonstration Introduction to Written Communications	Chapters 7-8	PS 4
Week 7 10/13 – 10/17	Tuesday Thursday Friday	Engineering Graphics – Pro/E Engineering Graphics – Pro/E Product Development, DEWALT – Greg Moores	Chapters 9-10	PS 5
Week 8 10/20 – 10/24	Tuesday Thursday Friday	Preliminary Design Reports & Presentations Safety Lecture / Prototype Fabrication • Milestone #4: Prototype Fabrication Start Midterm Exam		PS 6, PDR
Week 9 10/27 – 10/31	Tuesday Thursday Friday	Prototype Fabrication Prototype Fabrication Product Liability & Ethics – Vincent Brannigan	Chapters 13-14	
Week 10 11/3 – 11/7	Tuesday Thursday Friday	Prototype Fabrication Prototype Fabrication Globalization – Sheryl Ehrman	Chapter 11	
Week 11 11/10 – 11/14	Tuesday Thursday Friday	Prototype Fabrication Prototype Fabrication / Preliminary testing • Milestone #5: Preliminary Testing Introduction to Modern Engineering Trends		
Week 12 11/17 – 11/21	Tuesday Thursday Friday	Prototype testing Prototype testing Prototype testing		
Week 13 11/24 – 11/28	Tuesday Thursday Friday	Prototype Fabrication / Preliminary testing Thanksgiving Holiday Thanksgiving Holiday		
Week 14 12/1 – 12/5	Tuesday Thursday Friday	Redesign / Modifications Redesign / Modifications Testing – First Round Competition • Milestone #6: Final Testing		
Week 15 12/8 – 12/12	Tuesday Thursday Friday	Implementing modifications / Testing Final Design Reports & Presentations Testing – Final Round Competition		FDR