

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

Date	Day	Topic	Reading Due Dates	Assignment Due Dates
Week 1 1/28 – 2/1	Mon/Tue Wed/Thurs Friday	Introduction / Objectives / Product Specification Project Organization & Management / Product Development Introduction to Hovercraft and Levitation	Chapters 1-2	
Week 2 2/4 – 2/8	Mon/Tue Wed/Thurs Friday	Fluid Mechanics Teamwork Propulsion and fans	Chapter 3	
Week 3 2/11 – 2/15	Mon/Tue Wed/Thurs Friday	Fluid Mechanics <ul style="list-style-type: none"> Thrust test stand demonstration Levitation fan test stand demonstration Materials Selection / Communications Batteries and driving fans with the NXT (outputs)	Chapter 4	PS 1
Week 4 2/18 – 2/22	Mon/Tue Wed/Thurs Friday	Circuits <ul style="list-style-type: none"> Circuit soldering demonstration NXT Programming – Robolab Introduction to the NXT and Sensors	Chapters 5-6	PS 2
Week 5 2/25 – 2/29	Mon/Tue Wed/Thurs Friday	NXT Programming – Robolab Project Development Plan Presentation Hovercraft Dynamics and Control		PS 3 PDPP
Week 6 3/3 – 3/7	Mon/Tue Wed/Thurs Friday	Sensors & controls <ul style="list-style-type: none"> Sensors demonstration Engineering Graphics – Pro/E Introduction to Written Communications	Chapters 7-10	PS 4
Week 7 3/10 – 3/14	Mon/Tue Wed/Thurs Friday	Engineering Graphics – Pro/E Preliminary Design Reports & Presentations Introduction to Modern Engineering Trends <ul style="list-style-type: none"> 11:00-11:25 – Mel Gomez on Nanotechnology 11:25-11:50 – Elisabeth Smela on MEMS 12:00-12:25 – Sean Humbert on Bio-Inspired Design 12:25-12:50 – Rob Briber on Future Materials 		PS 5 PDR
Week 8 3/17 – 3/21	Mon/Tue Wed/Thurs Friday	Spring Break Spring Break Spring Break		
Week 9 3/24 – 3/28	Mon/Tue Wed/Thurs Friday	Safety Lecture / Prototype Fabrication <ul style="list-style-type: none"> Milestone #4 Prototype Fabrication Midterm Exam		PS 6
Week 10 3/31 – 4/4	Mon/Tue Wed/Thurs Friday	Prototype Fabrication Prototype Fabrication Product Development, DEWALT – Greg Moores		
Week 11 4/7 – 4/11	Mon/Tue Wed/Thurs Friday	Prototype Fabrication Prototype Fabrication Product Liability & Ethics – Vincent Brannigan		
Week 12 4/14 – 4/18	Mon/Tue Wed/Thurs Friday	Prototype Fabrication Prototype Fabrication / Preliminary testing <ul style="list-style-type: none"> Milestone #5 Globalization – Sheryl Ehrman		
Week 13 4/21 – 4/25	Mon/Tue Wed/Thurs Friday	Prototype Fabrication / Preliminary testing Prototype Testing Prototype Testing		
Week 14 4/28 – 5/2	Mon/Tue Wed/Thurs Friday	Redesign / Modifications / Psychology survey Redesign / modifications Prototype Testing		
Week 15 5/5 – 5/9	Mon/Tue Wed/Thurs Friday	Implementing modifications / Testing Testing Testing – First Round Competition <ul style="list-style-type: none"> Milestone #6 		
Week 16 5/12 – 5/16	Monday Mon/Tue	Testing – Final Round Competition Final Design Report & Presentations		FDR