

Design EPICS I Weekly Schedule Fall 2016															
Date (Mon)	Week	Project Studio 1 (Monday or Tuesday, Engineering Annex)					Project Studio 2 (Wednesday or Thursday, Engineering Annex)					Graphics (Wed, Thu, or Fri, CT129)			
		Due	Pre-Class	Topic	Assigned	Learning Objective	Due	Pre-Class	Topic	Assigned	Learning Objective	Due (SW HW due Tue 11:59 PM on BB)	Topic	Assigned	Learning Objective
Aug 22	1		Welcome Email	Introduce course, instructor, design log, marshmallow challenge in mini-teams.	IDEO video	3.1		Buy Comp. Notebook IDEO Video Syllabus & Course Map	Where do problems come from? Bug lists; "Fix the classroom" exercise.	Buglist, problem definition, and solution, on food.	1.1		Field & Engineering Sketching: Why hand sketching? Design, lettering, Human Figure, Landscape	Sketchbook (I); Process with Lettered Instructions; Landscape with Human Figure (I)	7.2, 7.3, 7.5, 8.8
Aug 29	2		Food storage solutions; mini-teams with informal presentations	Part 1: Problem Definition Part 2: Stakeholders		1.2, 2.4, 2.5		5 Dysfunction Pre-reading	Team work part 1 (5 dysfunctions), Team Assignments	Videos, User Empathy Reflection (I)	4.1, 4.2	In-class: Process w/ Lettered Instructions; Landscape w/ Human Figure (I)	Field & Engineering Sketching: 1-Point & 2-Point Perspective, Isometric Pictorials	Perspective & Isometric Drawings (I)	7.1, 8.5
Release Call For Proposals															
Sept 5	3	Labor Day : NO EPICS 151 CLASS Mon 5th or Tues 6th (note: you may have other classes in session Tuesday)					Design Log Food Desert Reflection & Notes	Read Call for Proposals; empathy articles	Part 1: Project questions. Observing and Interviewing stakeholders. Part 2: System breakdowns	Problem Definition	1.3, 2.4, 2.5	In-class: Perspective & Isometric Drawings (I)	Field & Engg Sketching: Obliques, 3rd Angle Ortho Multiview Projections, Ellipses, Dimensioning	Dimensioning Packet (I)	7.1, 8.4, 8.8
Sept 12	4		Draft Problem Definition	Scholarly and Authoritative sources, and guided research. (Meet @ Arthur Lakes Library) Problem Definition Checkpoint	Attend 1-2 SME talks	2.1, 2.2	User Empathy Reflection (I)	Problem Definition	Part 1: Finalize Problem Definitions. Project questions. Part 2:Team contract.	Team Contract (T); Refined Problem Definition	1.1-3, 2.3, 4.1, 4.5		Intro to SolidWorks: setting up, interface, intro to CAD sketching, reading orthographic drawing	SolidWorks HW 1 (I)	8.1
Sept 19	5	Team Contract (T)	Refined Problem Definition;	Part 1: Idea generation. Part 2: Rapid prototyping - how and why. Workshop safety and tour.	Idea log peer feedback; Looks-like Prototype (I)	5.3, 3.2			Focusing and decision-making tools.	Project Proposal (T)	5.4	Blackboard: SolidWorks HW 1 (I)	SW: Basic part modeling; design intent, sketching tools, contours.	SW HW 2 (I)	8.9, 8.10
Sept 26	6		360 Review Reading	Part 1: Teamwork part 2, peer reviews, 360 reviews. Part 2: Presentation skills, and overview of Proposal		4.1-5, 6.1			Part 1: Project Planning Part 2: Why Sketching?	Project Plan (T)	5.1,5.2, 7.1?	BB: SW HW 2 (I)	SW: Features and applied features.	SW HW 3 (I)	8.9, 8.10
Oct 3	7	Looks-Like Prototype (I); Project Proposal (T)		Team Presentations: Design Proposal; 4-5 "Looks-like" prototypes; pitch & justify best idea.		6.1, 3.2,		Teammate Evaluation	Part 1: conduct 360 review Part 2: confirm chosen design direction		4.1-5, 3.4	BB: SW HW 3 (I)	SW: working with planes, multiple bodies, modeling (equation, variables, Boolean)	SW HW 4 (I)	8.9, 8.10
Oct 10	8			Part 1: Breaking down a big project: Subsystems and interfaces. Part 2: Works-like prototype: why / how, design of prototype tests.	Works-like prototype (T)	1.3, 2.3, 3.3, 3.5		Industry research, Design Log notes	Part 1: Subsystems approval and direction. Part 2: Risk assessment	Testing protocols and safety plan	1.3, 3.6	In-class: Dimensioning Packet (I), Sketchbook (I)	Field & Engg Sketching: Auxiliary Views, Section Views, Detail Views, More Dimensioning	Auxiliary, Section Views Packet (I)	8.6, 8.7, 8.8
17-Oct	9	FALL BREAK – No class Mon 17th or Tue 18th					Project Plan (T); Testing Protocol w/ Safety Plan		Part 1: Team time - subsystems, testing, prototypes. Part 2: Overview of subsystems report.	Subsystems Report (I)	3.4	BB: SW HW 4 (I)	SW: sweep, shell, split, revolve, dome, patterns, ribs, holes.	SW HW 5 (I)	8.9, 8.10
Oct 24	10	Subsystem functionality testing (T)	interview an engineer or scientist	Part 1: Subsystems Testing Part 2: Technical writing		3.3, 3.4, 3.5, 6.3			Stakeholder feedback on works-like prototype. Coaching of design iterations.	Stakeholder Feedback	2.5, 3.1, 3.4	BB: SW HW 5 (I)	SW: Assemblies and exploded views; smart fasteners.	SW HW 6 (I)	8.9, 8.10
Oct 31	11	Iterations based on feedback (T)		Subsystem testing.		3.3-5	Subsystems Report (I)	TBD Part 1 Embedding graphics, tables.Part 2- validating claims			6.2, 6.3	In-class: Packet Corrections (I); Auxiliary, Section Views Packet (I)	Field & Engg Sketching: Working Drawings; Field and Engg Sketching Mini-Exam		7.1-7.5, 8.1-8.9, 8.12
Nov 7	12	Interface testing iterations (T)		Prototype testing.		3.3-5			Overview of final report, tradeshow presentations.	Final Design Report (T); Trade Show Presentation (T)	5.6, 6.2, 6.3	BB: SW HW 6 (I)	SW: Drawing sheet, dimensioning, Bill of Materials, design intent.	SW HW 7 (I)	8.6, 8.7, 8.8, 8.11, 8.12
Nov 14	13	Works-Like system testing (T)		Prototype testing.		3.3-5	Works-Like Prototype Testing Progress (T)		Part1: Wrap up prototype tests. Part 2: Materials list and cost estimation.		3.3-5, 5.5	BB: SW HW 7 (I)	SW: Exam review, tips & tricks		8.9, 8.10
Nov 21	14	Works-Like system testing (T)		Part 1: Prototype testing (for teams not cleared yet) Part 2: Other catch-up		3.3-5	THANKSGIVING – No class Wed 23rd, Thu 24th or Fri 25th					No GRAPHICS			
Nov 28	15	Final Teammate Evaluation (I)		Part 1: Trade fair presentations and artifacts. Part 2: Supervised feedback: peer and team.		6.2, 4.4			Course evals. Supervised team time.		4.4	In-class: Design Log (I)	SolidWorks Exam. 180-minute CSWA exa		8.9, 8.10
Dec 5	16	Final Design Report (T); Trade Show Presentation (T)		Exhibit final solution; judging		6.2, 6.3			EPICS 151 Final Competition 5-7:30 pm Wednesday, Location TBD		6.2	No GRAPHICS			
Dec 19-Jan 10		Exams & Winter Break													