

Mon/Wed, 8:30-9:50 am KAP 145	J.L. Higl OHE 310H higl@usc.edu Office Hours: By Appt.	M. Taveras Ponce HSA 6214 michelle.taverasponce@med.usc.edu Office Hours: By Appt.
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Necessary Preparation: Prerequisite: ISE 225, ISE 460 and ISE 382 (or DSO 435). Co-requisite: ISE 315 and ISE 435. As a general statement, students must be “on-track” relative to defined curricular flow within appropriate program handbooks.

Introduction: This is the first of a two-course sequence that serves as the capstone design experience for BS ISE students. The primary goal is to ensure that students are prepared for engineering practice. Demonstration of this preparation will primarily involve a significant design experience that will span the two semesters. Students will be expected to draw upon the totality of their curricular experiences, and may find that they need to go beyond these.

Outcomes: Upon completion of ISE 495ab, the student should demonstrate

- 1) an ability to define and organize a realistic project scope
- 2) an ability to recognize and manage impediments in obtaining information and approvals
- 3) an ability to present and sell ideas to higher-level management
- 4) an ability to convert a project's worth into financial indicators
- 5) an ability to function on multidisciplinary teams
- 6) an understanding of professional and ethical responsibility
- 7) an ability to communicate effectively, using both written documents and oral presentations
- 8) an ability to use the techniques, skill, and modern engineering tools necessary for engineering practice

Required Textbooks (available from Amazon.com)

- *The Five Dysfunctions of a Team: A Leadership Fable* (Patrick Lencioni, Jossey-Bass Publishing)
- *Project Management Lite: Just Enough to Get the Job Done ... Nothing More* (Juana Clark Craig, CreateSpace Publishing).
- *Others, as appropriate.*

Grading Policy: Grades will involve a combination of individual and team scores. Most requirements have specific due dates, others have more flexible timing. Due dates are strict – the coaches are not amenable to late submissions.

The following percentages will be used in calculating the final score for each student in ISE 495a:

Deliverable	Report	Presentation	
		Team Component	Individual Component
Participation			25%
Scope of Work	25%	12.5%	See note*
Milestone	25%	12.5%	
Pop-Up Opportunities	See note*		

*Note: Two elements of the grade for ISE 495b can be completed during ISE 495a. These are Individual Presentations and Pop-Up Opportunities, which will each constitute 10% of the grade in ISE 495b. Students are advised that there are limited opportunities for these.

Date	Meeting Plan	You're working on	Deliverables Due
8/21	Introduction	Five Dysfunctions; Proj. Mgmt Lite	
8/23	TBD		
8/28	Team Management – 1		
8/30	Team Management – 2		
9/4	(Labor Day; No Class)		
9/6	Team Management – 3		
9/11	n/a		Request to Pitch a Project
9/13	Pitch Day		
9/18	Pitch or Pick		
9/20	n/a		
9/25	Project Teams Defined		<i>Due from coaches</i>
9/27	n/a	Scope of Work: deliverables, milestones, timelines.	
10/2	n/a		Start project work with project Sponsors
10/4	n/a		
10/9	Mandatory Group Meetings with Coaches		
10/11			
10/16	Interim Scope of Work Presentations		
10/18			
10/23	n/a	Project!	Pop-Up Lecture Requests
10/25	n/a		
10/30	n/a		Scope of Work Document
11/1	n/a		
11/6	Pop-up Lectures		
11/8	Pop-up Lectures		
11/13	Roundtable project check in		
11/15	Pop-up Lectures		
11/20	n/a		
11/22	(Thanksgiving; No Class)		
11/27	Extended Class -- evening?		Milestone Report & Presentation
11/29	TBD		
12/6	Final Exam Date		No exam!