**ISE 544 - Quality Management for Engineers (3 Units)** 

Fall Semester 2016

Mondays 6:40 pm - 9:20 pm

Room: RTH105

Instructor: Ali Nowroozi Teaching Assistant: TBD

Office: GER216C Office: TBD Hours: Thursdays 3:15 pm – 5:15 pm (by appointment) Hours: TBD Phone: 213-740-0867 (During office hours ONLY) Phone: TBD E-mail\*: nowroozi@usc.edu E-mail\*: TBD

**Objective:** This course provides a framework for understanding and improving the effectiveness of engineering team management. The course will explore theory from disparate areas, including organizational behavior, engineering, and business management. Several aspects of teamwork will be examined, from team formation and team dynamics to decision-making and negotiation.

# **Text Books (Required):**

1. Lawrence Holpp, Managing teams, The McGraw-Hill Companies. ISBN 0-07-071865-2

- 2. Thompson, L. L., Making the Team: A Guide for Managers, Fifth Edition. Prentice Hall.ISBN-13: 978-0132968089 & ISBN-10: 0132968088
- 3. Lencioni, P., The Five Dysfunctions of a Team: A Leadership Fable. 2002: Jossey-Bass, ISBN: 0787960756

**Course Material:** Text Book, all topics discussed in lecture by the instructor, guest speaker (if any), other students, and the all related handouts.

**Study Guidelines:** The lectures and class discussions are <u>not</u> limited to reading assignments. Merely reading the text book does not guarantee students' successful completion of the course. The instructor's Class notes are <u>not</u> sufficient either and all students are responsible to take their own notes in the class and use them to study and elevate their understanding of the reading materials and the class discussions.

### **Performance Evaluation:**

Class Participation
 Homework & Case Studies
 Exams
 Term Project
 Total
 CLASS LEVEL)
 240 (INDIVIDUAL LEVEL)
 (INDIVIDUAL LEVEL)
 250 (TEAM LEVEL)
 1000

### 1. CLASS PARTICIPATION consists of two portions:

- IN CLASS students are evaluated based on the level and the quality of their participation in class discussions. While we do not take attendance in this course, students who miss the lectures will also miss the opportunity to improve their scores through class participation.
- DEN students are <u>primarily</u> evaluated based on their assessment of the class discussions, posted on the <u>discussion board</u>, under the appropriate lecture forum, <u>within one week of</u> <u>the lecture</u>. They are also encouraged to participate <u>live</u> in class discussions and will get

<sup>\*</sup> All written communications with the Instructor or the Teaching Assistant <u>must</u> be through emails. Emails must be <u>short</u> <u>and to the point</u> and they are normally answered in two business days. We will <u>not</u> answer the questions that students post on the DISCUSSION BOARD. This medium is for course-related discussions among the students only.

credit for that. Text messaging through WebEx is not the most effective way of communication, but it will be accounted for <u>as practically as possible</u>, if a student has no other option. Den students who are able to physically join the class, are strongly encouraged (but not required) to do so.

- ALL STUDENTS TO AVOID USING THE DISCUSSION MEDIA (D2L, WEBEX, ETC.) TO ASK QUESTIONS FROM THE INSTRUCTION TEAM OR TO DISCUSS PERSONAL/NON-COURSE RELATED TOPICS (EXCEPTION: THE WELCOME PAGE OF THE COURSE SITE IS DESIGNED FOR POSTING PERSONAL INFORMATION). ALL QUESTIONSS SHOULD BE <u>EMAILED</u> FIRST TO THE TA AND THEN, IF NOT RESPONDED TO IN A TIMELY MANNER, TO THE INSTRUCTOR.
- The Course instructor will be the sole judge of students' level of class participation.
- 2. <u>HOMEWORK ASSIGNMENTS</u> consist of <u>3 homeworks</u> and <u>3 case studies</u>. You will be expected to read the case study <u>individually</u>, write a report on it, and be prepared to discuss the case in class. One week after a case study report is submitted, it will be discussed in the class. After case submittal (and <u>ONLY AFTER</u>) DEN students may post their comments on the case study via DEN Discussion Board, on that week's module (like any other discussion topic for the week). CASE STUDIES MAY <u>NOT</u> BE DISCUSSED BEFORE SUBMISSION DEADLINE. The HOMEWORKS and CASE STUDIES due dates are shown in the next page. <u>Homeworks and case studies points are distributed as follows:</u>

3 Homeworks	3@30 = 90
3 Case Studies	3@50 = 150
Total Homework & Case Studies	240

- 3. ALL INDIVIDIAL ASSIGNMENTS MUST BE PERFORNED **INDIVIDUALLY**, NO "TEAMWORK" ALLOWED HERE! While it is inevitable to answer some "definition" questions using book words (e.g. "what is the definition of Critical Path Method?"), students must attempt to use their intellect and answer the questions in their own words. In case of necessity, appropriate quotation is required. Students who miss the deadlines and submit homeworks and case studies up to one week late, will be graded based on 80% of that assignment total points. No assignment will be accepted afterwards.
- 4. **THREE EXAMS** will be given on with the following points distribution:

EXAM #1 (1 Hour – In Class)	100
EXAM #2 (Take-Home)	200
FINAL EXAM (Optional)	100
Total EXAMS	400

The exams will cover the material presented up to and including the preceding lecture. Points will be assigned to each section of the exam. Partial credit will be awarded according to work shown. No re-takes will be allowed. No make-up exam will be given.

5. Students start working on their <u>TERM PROJECT</u> of their choice after SESSION 3, the project criteria and its grading structure will be explained in SESSION 4. The teams will be challenged for their proposals in SESSION 5 and students get to "invest" in the other teams' projects (details to be explained in session 4). Final presentations are scheduled for the last 2

# sessions of the class (Nov. 21 and Nov. 28). <u>ALL PROJECT REPORTS ARE DUE ON Nov. 28), AT THE END OF THE CLASS</u>.

# 6. LINES OF COMMUNICATION:

- All students <u>must</u> follow the communication protocol set forth by the Instruction team.
   Assignments that are supposed to be posted on the course site will NOT be graded if submitted via other media (email, hardcopy, etc.), unless specifically and exceptionally agreed, in advance.
- Assignments must be submitted in the exact format instructed by the TA and/or the instructor. In cases of discrepancy, the instructor's guidelines supersede. Assignments that do not follow submittal guidelines (File type, naming structure, content format, etc.) will NOT be graded.
- All students are responsible for proper communication and for timely transfer of their
  assignment files. All students to make sure all their communication lines are open and they
  are able to properly upload their files, during the FIRST WEEK of the semester. In the
  exceptional case of possible glitch in the DEN system, IF IT CAN BE PROVEN, a student
  may submit the assignment by email. In this case, the "Date Created" attribute of the
  submitted file will be considered as the submittal date.
- All students are responsible to have proper training with the D2L system. If you need to schedule a training please contact DEN staff directly (or through the course TA) to arrange for a training session as soon as possible.

All due dates are provided in the next page: "Assignments & Due Dates". All students must take the exams on the exam dates and times. Exceptions only include special cases such as sickness, time zone difference (for DEN students), or such unavoidable circumstances. PLEASE DO NOT SCHEDULE ANY TRIPS ON THE EXAM DATES. PERSONAL OR BUSINESS ENGAGEMENTS DO NOT JUSTIFY EXAM DATE & TIME CHANGES.

# **Final Grades:**

Course FINAL GRADES will be determined by the distribution of point totals for the class. "Natural groupings" will be used to assign letter grades. The highest scoring group will receive A's, the next group is the A-'s, and so on. A single point will not be the difference between any two letter grades. A "gap" must exist to create a grade boundary. If there are no gaps, everyone could get A's!

THE GRADING PROCESS WILL BE EXPLAINED IN DETAILS IN THE SECOND LECTURE. STUDENTS ARE RESPONSIBLE TO UNDERSTAND THE PROCESS CLEARLY AS THEIR ACTUAL PERFOMANCE MAY DIFFER FROM THEIR PERCIEVED PERFORMANCE WHICH IS CONVENTIONALLY BASED ON PERCENTAGES ONLY.

THIS IS A QUALITATIVE MANAGEMENT COURSE AND STUDENTS PERFORMANCE ASSESSMENT IS SUBJECT TO THE INSTRUCTOR'S JUDGEMENT. EACH STUDENT'S PERFORMANCE DATA (<u>TACIT INFORMATION</u>) COMBINED WITH THE INSTRUCTOR'S INTUITIVE ASSESSMENT OF HIS/HER LEVEL OF EFFORT AND LEARNING EXPERIENCE (<u>IMPLICIT INFORMATION</u>) WILL DETERMINE THAT STUDENT'S OVERALL GRADE. ULTIMATELY, THE INSTRUCTOR WILL BE THE SOLE JUDGE OF ALL STUDENTS' INCREMENTAL AND FINAL GPA'S.

# **Assignments and Due Dates:**

Session	DATE	TOPIC	ASSIGNMENTS DISTRIBUTION	ASSIGNMENTS DUE	READING ASSIGNMENT
1	Aug.t 22	Introduction: INDIVIDUALS Versus TEAMS			Handout Thompson Ch.1
2	Aug. 29	Team formation Team performance Initial Teams Formation	HW #1 Case #1		Thompson Ch.s 2&4 Holpp Ch.1
No Class	Sep. 05 Sep. 09	Labor Day Holiday <i>Deadline for add &amp; drop</i>		<b>3</b>	Labor is superior to capital & deserves much the higher consideration.  - ABRAHAM LINCOLN
3	Sep. 12	Teamwork Culture Finalized Teams Formation Explain Term Project Criteria	Project Proposals due in 2 weeks	HW #1 (30 points)	Thompson Ch. 5 Holpp Ch.2
4	Sep. 19	Communication & Collective Intelligence	HW #2 Case #2	Case #1 (50 points)	Thompson Ch. 6 Holpp Ch. 4
5	Sep. 26	Competition & cooperation The Shark Tank Experience! Case Study #1 Discussion		<b>Project Proposals</b>	Thompson Ch.s 8&12 Holpp Ch.10
6	Oct. 03	Cohesion & Conflict (Exam #1 – 100 Points)		HW #2 (30 points)	Thompson Ch.s 8&12 Holpp Ch.10
7	Oct. 10	Human Resource Practices	HW #3 Case #3	Case #2 (50 points)	Thompson Ch.3 Holpp Ch.12, Handout
8	Oct. 17	Team Leadership  Case Study #2 Discussion			Thompson Ch. 11 Holpp Chs 7&8, 9&11
9	Oct. 24	Decision making & Problem Solving	Take-Home Exam #2 (200 Points)	HW #3 (30 Points)	Thompson Ch. 7 Holpp Ch. 8
10	Oct. 31	Team Negotiation Term project open discussion			Thompson Ch. 7 Holpp Ch. 8
11	Nov. 07	Creativity     Leadership & Management lessons from Chaos Theory		Case #3 (50 points)	Thompson Ch. 9 Handout
12	Nov. 14	Case Study #3 Discussion DEN Discussion Open Discussion & Conclusion		Exam #2	
13	Nov. 21	Term Project Presentations			
14	Nov. 28	<b>Term Project Presentations</b>			
	DEC. 12	Final Exam - Optional (100 Points)	In Accordance with USC Final Examinations Schedule Guideline: <a href="http://classes.usc.edu/term-20163/finals/">http://classes.usc.edu/term-20163/finals/</a>		

### **Outreach DEN Students**

This course is conducted in outreach format, meaning, it is available to off-campus students via video recording and streaming. Students in on-campus or off-campus receive the same instruction and perform the same tasks.

### **Language Support Systems**

USC provides support for students who need help with scholarly writing. Students whose primary language is not English should check with the American Language Institute http://dornsife.usc.edu/ali, which sponsors courses and workshops specifically for international graduate students.

### **Emergency Services**

If an officially declared emergency makes travel to campus infeasible, USC Emergency Information http://emergency.usc.edu will provide safety and other updates, including ways in which instruction will be continued by means of D2L, blackboard, teleconferencing, and other technology.

### **Statement for Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the professor(s) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m.—5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

# **Academic Integrity**

USC seeks to maintain an optimal learning environment. The Department of Industrial and Systems Engineering adheres to the University's policies and procedures governing academic integrity as described in Scampus, the Student Guidebook. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own. Scampus, contains the Student Conduct Code in Section 11.00, while the recommended sanctions are located in Appendix A. Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at http://www.usc.edu/student-affairs/SJACS. All students are expected to understand and abide by these principles, as they will be strictly enforced throughout the semester. Note: This syllabus is subject to change.