13 students (out of 35 registered) responded to the Assessment survey submitted via e-mail with a formal reply to the TA requested from Oct 24 thru Nov 10, 2011. The lecturer invited and reminded students, in class and via email, to respond to the assessment. The Lecturer indicated the survey results would help to improve the class content/delivery and to achieve the learning objectives.

SURVEY QUESTIONS:

1. **Class Preparation:** Each day the professor comes to class well-prepared and organized.
2. **Communication:** I can easily understand the professor’s explanations and discussions in class.
3. **Explanations:** The professor's explanations help me learn the material more deeply and faster.
4. **Responsiveness:** The professor makes me feel welcome and answers my questions effectively.
5. **Availability:** I have found the professor whenever I needed help.
6. **Grading:** Grading is timely, fair and consistent.
7. **Physical Environment:** physical classroom helps my learning and encourages me to attend class.
8. **Learning Outcomes:** I am aware of the learning outcomes to succeed in this course and think I am making progress toward these outcomes.
9. **Assignments:** Assignments, exams, projects, homework, etc., help me achieve the class learning outcomes.

RESPONSES

a. Excellent: Based on this area, I could recommend an award for this professor.

b. Very good: I cannot think of any ways to improve in this area.

c. Good: I like what is happening but can think of helpful improvements.

d. Fair: I see some problems in this area

e. Poor: Problems in this area hinder my learning significantly.

The Table below details a summary of the students’ replies to the survey questions. All numerical values correspond to percentages (100% =13 replies, 1 student = 7.7%). The Table below includes the sums a+b+c.
Lecture comments and steps to remediate issues of concern
The survey results show scores=100% for rankings (a) excellent + (b) + (c) good. The lecturer considers scores less than 80% as items that need immediate remediation.

Read below the students’ comments regarding the best & worst parts of the course. Overall, the students are satisfied with the course contents and outcomes, finding it useful and resourceful. Thanks!

A certain area of concern is the inadequate room and A/V equipment. The room is too small for 30+ students and the A/V equipment is not permanent.

Various students offer constructive criticism and excellent ideas to improve the course. Conscientious students point out to a serious shortcoming: the lack of student participation in class discussions. The course contents would be more lively and fruitful with students engaged actively in their education and learning. The lecturer agrees and continually tries, alas just a few students volunteer to voice an opinion or ask a question. Only a few are curious about the presentation material prepared by other groups. Even fewer are interested in learning more from the guest presenters. How to engage the students [to be or not to be] is the perennial question the lecturer asks himself before and after every class.

The lecturer agrees that there have been too many guest presentations. Some presenters have not been as engaging as one would have expected. They are engineers after all! The large number of guests is due to the overwhelming positive replies from practicing engineers wishing to share their experiences. Presently, the lecturer realizes that more is NOT better, needing to be more selective in selecting guests. All the presenters have distinguished professional careers that showcase various paths, technical and managerial; all paths involving more in depth studies and knowledge with a continuous demonstration of a positive attitude and desire to serve. Students also learned that some engineers are total bores, the kind they certainly do not wish to become.

The lecturer has decided to cancel the remaining guest presentations. The guests would have perhaps urged the students to continue their learning. Apparently, this advice does not echo well with the current students. In the remaining classes, Dr. San Andrés will continue to lecture about cultures and introduce one or two technical aspects of importance for a practicing engineer. The lecturer hopes to continue instilling in the students the practice of the soft skills that are paramount to the success of young engineers.

Some major comments from students

<table>
<thead>
<tr>
<th>Question</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Class preparation</td>
<td>Love how dynamic the class is/</td>
</tr>
<tr>
<td>2 Communication</td>
<td>VERY good communicator/</td>
</tr>
<tr>
<td>3 Explanations</td>
<td>Always answers the students questions/ Answers many questions from 1- minute papers/</td>
</tr>
<tr>
<td>4 Responsiveness:</td>
<td>That’s what the class is about/</td>
</tr>
<tr>
<td>5 Availability</td>
<td>N/A</td>
</tr>
<tr>
<td>6 Grading</td>
<td>AWESOME/</td>
</tr>
<tr>
<td>7 Physical Environment</td>
<td>Very Entertaining/ Civil Eng Building is Nasty/</td>
</tr>
</tbody>
</table>
I dislike the classroom, desks (too small)/

<table>
<thead>
<tr>
<th></th>
<th>Learning Outcomes:</th>
<th>Assignments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>All of them are there/ I feel I have learned more practical concepts in this class than any other thus far/</td>
<td>Very Considerate to our needs/ I like learning the information but individual assignments would be better than groups/</td>
</tr>
</tbody>
</table>

**BEST PARTS OF COURSE - SUMMARY**

What aspects of the class do you like best?

Students provided individual comments on the class. Blank (empty) responses omitted

1. It’s a very dynamic class that has become so interesting it is the highlight of my day. I thoroughly enjoy his presentations and the presentations the other groups have developed. I feel my presentation skills have improved.

2. Openness of the discussion.

3. The format…I love that we talk about modern day issues and issues that will affect us as engineers and not just learn technical engineering info like in all of our other classes.

4. I enjoy learning more about the “soft skills” of engineering and how they are practical. I also like the group presentations because they shed a lot of light on different topics.

5. Enjoy the fact that we cover topics that we choose and very applicable to future careers.

6. I enjoy learning through the personal, foreign experiences of the professor. I am striving to communicate better with different cultures, therefore, knowing their customs and values will benefit me greatly in the future.

7. I enjoy the “open-ness” of the class - more or less the communication between the students/professor. I also like the presentations. Always learning something new.

8. One minute papers are a good way for students to ask questions that they might not be comfortable asking during lecture.

9. I thoroughly enjoyed the topics presented in this class, particularly those dealing with what engineering looks like out in the real world. I really liked the input from the former students especially because it has helped me shape and focus my job search based on what I learned from them.

10. I really enjoy the discussions we have as a class. I think that they really help spread different ideas around and great an open environment.

11. The lectures I enjoy most are the ones about cultural awareness and cultural differences, especially when Dr. San Andres shares about his many experiences abroad. I also enjoy listening to
guest speakers, particularly Ash Maruyama, Shanna Shimmons, and David Ransom.

12. Having an allowance of 7 missed classes. This helps as I am doing job interviews etc. I like hearing San Andres’ personal views/insight. He’s a good, personable speaker.

13. I really enjoy the guest speakers that come to talk to the class. They have been very interesting and have usually brought good insight on what to expect after graduating and how to manage my career. Also, I like the variety, there’s people who went straight to work, those who went to grad school then to work, and those that are still in school.

**WORST PARTS OF COURSE - SUMMARY**

Blank (empty) responses omitted

1. Nothing, It’s all good!

2. Making Presentations

3. I enjoy this class…no complaints.

4. **I would like to have fewer company presentations and more lectures, honestly.** Although I learned a good amount from the practical presentations, like the very first one for example, I could do without the presentations that come across as a recruitment effort.

5. Sometimes I believe that the peer presentations are a little too long and extensive. I absolutely see their necessity and they aid me well in developing my public speaking skills, however, shorter presentations would still allow for that and also allow the professor more time to speak and share his experience.

6. Sometimes I find it difficult having a word limit on the group essays because each group member has their own specific opinion on the topic.

7. **I didn’t like the lack of discussion on the part of the students. I attempted to answer the lecturer’s questions and participate in the class, but generally no one else chimed in to continue any discussion.**

8. Sometimes it can be hard sitting through presentations for an entire class period, but they have all been very interesting, so there isn’t much really anything bad about the course, at all.

9. This is a difficult question to answer because I enjoy this class very much. If I had to choose, I’d say listening to some of the other group presentations, but this is only because my interests simply do not line up with the interests of everyone! I also find many of the other group presentations very interesting.

10. The length—maybe offer it on MWF or MW for 50 minutes

**Suggestions to improve the course**

Students comments:
1. More videos! Or maybe instead of one group essay another group presentation. I feel we learn more from presentations that from the essays.

2. I would like to see more student interaction and discussion. Obviously the professor cannot force students to ask questions or respond to discussions, but I would like to have more interaction.

3. Well organized class

4. See “worst parts of course” section.

5. Great class! I feel that it was a good decision to take this course as an elective because I'm learning things that will be valuable in the future (my career).

6. As previously stated, I didn’t like the lack of discussion but I’m not sure how to improve the course by eliminating this shortcoming. It seemed to depend on the students taking the course. Most didn’t feel like actively participating. Perhaps this could be that it seems like most students took this course for “an easy A” after hearing from the previous semester’s students that it was an easy course. I wouldn’t recommend increasing the difficulty of the class because I feel like it would destroy the low-key nature needed to discuss some of the subjects involved. However, perhaps advertising the course in a different manner so as to attract those actually interested in the subject matter as opposed to those seeking an easy course would be extremely helpful in eliminating the lack of participation.

7. The only improvement I think could be made would be to increase student participation somehow. I wish we had more time and more topical discussion.

8. I feel that sometimes people do not volunteer their own information or opinions because they are simply shy or don’t know others in the class well enough to feel comfortable sharing. I think it might be beneficial to have some sort of “team-building” or “ice-breaker” activity or assignment in the beginning of the semester to make the class feel more cohesive and comfortable with sharing opinions and ideas.

9. Guest speakers are good, but could be more unique in their talks. (Tired of hearing about grad school). More individual work instead of group work.

10. Perhaps one or two individual assignments would be beneficial.