

# Detailed Opinions

## SENIOR CLASS 2005

*Students opinions gathered the last day of class.*

I really liked the class. It was hard and the work load was great, but I learned so much. I think that I would not have felt confident in the work force if I had not taken this class. One of the things I learned the most from were the quizzes. It was almost like I needed to learn everything before everything clicked and the quizzes really helped me do that. I was especially glad that you were hard on me and made me learn how to apply the separations for my personal project, but that you were willing to answer my questions or ask me more questions to lead me in the right direction when I was stuck. It helped me to see that I really could do it. Thank you also for making me explain the science thoroughly for our group project. It caused me to connect dots in my head about the importance of thoroughness.

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Overall, it's been a pretty good semester. Obviously it was pretty intense at some points, but I was fortunate to have a very good group, so I never had to feel like I was doing someone else's work for them. I'm glad we finished in the top 3 out of the class. I think our project was really good, and it makes me happy to know that other people acknowledge that too.

My big suggestion for next year involves people who do not pull their weight in their groups during the first half of the semester. When you re-distribute them amongst existing groups, those people generally fail to ever really catch up with the existing group. Obviously they had some problem with more or less leeching off their group the first half of the year, and I would imagine they wouldn't do much different when put with a new group. I know there's exceptions to this, but I think it holds true generally. My solution to this would be to take all the kids who mooched off their groups the first half, and put them all in a group together for the second half. Force them to come up with their own ideas and do their own project. Don't leave them someone to leech off of. I'm all for giving people second chances, but I think they should have to work harder than everyone else to earn the same grade since they got that second chance. Obviously, these are just my opinions, but I think it would work well in making the leeches work more.

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**First, I think that maybe it would be better if the quizzes were consistently of the same difficulty level. it was hard enough to prepare thinking that we had to know an entire course and then sometimes they were very difficult and other times we felt we had wasted our time studying. So maybe if they were on the same level it would**

**reduce a little test anxiety and people would know better how to approach them while still reviewing all the material that they need to.**

**Next, I thought that the homework required a ridiculous amount of effort to complete fully. and the time frame for the due date of hwk 2 was horrible. I think it'd be better if hwk 2 was due the week after the midterm report corrects are due.**

**Thirdly, I think the personal projects did not serve their purpose. Those of us that worked very hard on the projects fear that our grades will suffer because of the personal project. Plus the exercise just seemed dumb. The people who needed to show individual effort just asked the rest of us questions on how to do their project (anything from "teach me to do lng heat exchange" to "how do you find pump work") and used stuff from the internet. i don't think that you should use the personal projects again. the rest of us were miserable with them and then the crap that we were trying to do. so basically, the trial run seemed to flop from the students' point of view.**

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During the course of this class we have learn a lot from you. I think the structure of the class although very demanding for both sides of the equation, it is ok. I can not expect less or more from the incoming juniors. I believe this class is good training for what it is outside the university waiting for us. The frustrations, sleepless night, and extremely hard work are some of the things that I think are expected from us in the industry (from what I heard from people in the same area, including professors) My experience was gratifying throughout the semester as I saw how our project come together; I can honestly say this because I never hate my project or else around it. I have to acknowledge that my success is not mine alone is from all us in my group, and I would recommend to incoming junior to think of your group members not as rivals but as allies. You do! not! have to be better than they are the group must be better than you, I can not emphasis this strong enough. The key word here is "Teamwork"

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I have mixed feelings about my experience in the class. For the most part it was ok, meaning I think I probably learned the things I needed to learn, but I think a couple of things didn't work. The biggest problem was the redoing the groups for the second part. I think for the most part this did not work, except for groups where only minor changes were made, i.e. only one or two people were added or taken away. There just was not enough time for big changes to happen after Spring Break, especially when you feel like you are competing with the other groups who did not deal with many changes in their group members. I think the quizzes and assignments were ok, although more instruction on GAMS might be helpful.

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I recommend not having an individual and group project at the same time. I think my individual project suffered because I spent most of my time on the group project because other peoples grades also depended on my performance. Also if you are going to ask such a "program oriented" question (the GAMS question in homework 2), it would help if

you provided more than a simple template. This class helped me learn a lot and forced me to use some knowledge from almost all of my other classes. For that I thank you, however I have lost a lot of hair during semester and several years of life.

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I think the main thing that needs to be changed is the due date of the first project. This year it was at spring break. If group compositions are to be changed, this due date needs to be earlier so that the new people can have time to learn and catch up. Also, this would help people to always have a report ready to turn in...not necessarily complete...but one that can be updated as work is done rather than doing all the work then writing the report. Other things that should be changed is more examples in Gams or pro II if the curriculum isn't changed to incorporate these things into earlier classes. Many of the student I talked to were to inexperienced in programming to learn this stuff and still keep up with the enormous workload of the senior year. The result of the Gams inexperience this year was the lack of good work on the second homework Gams problem.

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I think one main thing that helped my experience was the fact that I was only taking this class. I took two other pass/fail graded classes that took hardly any of my time away from this class. I'm glad that I didn't have to start another project halfway into the semester and that I didn't have to join another group. Looking back, I'm glad I did the personal project although I believe if I had taken other classes, the personal project would have been impossible to complete. I'm very glad we only had 2 homeworks and that they were due before spring break. I wish the quizzes had been more spread out over the semester but I'm glad that we didn't have any class for the last few weeks. I'm glad the grade distribution is specified (i.e. 60%, 25%, 15%). Like I said earlier, we really need to be taught GAMS and PRO-II much earlier in the curriculum and more than just example problems and templates especially since we had extensive homework based on these programs. I especially appreciate you being available for questions and help. I really think this class has given me the confidence to become successful.

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I actually enjoyed the class overall because I learned something from it, although the schedule, stress, etc. got to be a bit much at times. One thing to tell future students is the depth of experiences this class offers that can be used in interviews. I can't tell you how many times an interviewer asked me "Can you tell me about a time when you had a deadline approaching for a project that wasn't enough time?" or "Tell me about a group that you have worked and what role did you assume?" My final interview for the job that I accepted (with Anheuser-Busch) I ended up talking with the resident engineer about the molecular discovery process I was learning for capstone and he was fascinated. . . This class has taught me a lot about what time management skills I already have and what I need to build on a bit more. . .

If anything could be changed about the class, I would avoid adding members to groups without consulting the group first. I feel like all that we accomplished after Spring Break could have been done with the original members alone... Yes the additional member contributed to the project, but not in such a way that necessitated her addition. Although it may take something away from the spirit of the projects, maybe you should consider telling groups and individuals what your ultimate expectations are of each project (however reasonable or unreasonable they are. . .), so that gives students a fixed goal to reach for.

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This class almost killed me at first - however the second half of the semester was much more reasonable than the first. I do have several things that I feel should be changed however. . .

Two person groups are a bad idea. I think the minimum should be 3 per group, just in case one member doesn't work well with the other. If this happens in a 3-person group, at least each person is only doing half a project, instead of a full project on their own, which is really how I felt. I had to quit my job because of all the time I put in to the first project, and my quiz scores suffered because I never had time to study, I didn't even START researching for my other class until after the project was finished, and I made myself sick trying to get it done. To be honest, the grade I received didn't reflect the fact that I feel I did the majority of project on my own. However, I realize the overall quality of the project was poor, because there was very little combined effort.

I like the individual projects. Keep them. They give a better idea about the all-around engineering quality of a person's work.

I did not like being assigned ONLY the financial section of a report. To be honest, I am an engineer, and, while financial planning is important, engineering work is probably more so. (At least, it is in my opinion). It is unfortunate that I did not have a chance to do any engineering work, other than helping Justin, during the second group project.

The homework should be due AT LEAST two weeks away from a project due date, if homework are to be assigned.

I think it would be better to have an assignment that is done during class with a TA, that way we can get more one-on-one help with things like GAMS and @risk. The tutorials were somewhat helpful, but very few people could take that tutorial and make a stochastic model. More information is needed.

The quizzes were both good and bad - good for review, bad because the people in 4-person groups had more time for studying than those in 3 or 2 person groups -or, in xxx's case, essentially 1 person groups. It might be good to remove requirements for smaller groups - such as, 4-member groups need full economic analysis, but 3-member groups

only need to estimate NPW and ROI, or maybe do not need a many variations. Try to keep all groups the same size.

I think that is all. This class almost killed me at first, but it got better when I was put with a group I could work with. Might be a good idea to dissolve a group mid-project if it looks like it is SERIOUSLY not working out. I think if our group had been dissolved into two individual projects mid-way through, the project would have been much better.

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I understand that part of the class objective is to evaluate a person's performance while they have multiple deadlines/ projects, but I feel like this aspect takes away from some of the learning. This aspect pushes students to take short cuts, rather than really trying to understand the work they are doing. Personally, I would have a better sense of accomplishment about better work instead of more work.

It also seemed like some of the work that took a lot of my time was work that could be done more quickly if given better tools. Pricing is one large problem. It seems that too often the price of a chemical is proprietary information that is sold but not given away. Given that we have limited time, this is a major and seemingly unnecessary nuisance.

Otherwise the class was somewhat enjoyable (and tiring). The subject of the projects was very interesting and challenging. I enjoy the challenges, just not the deadlines.

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I want to thank you for the opportunity that I had in the class. .... One major thing that I disliked about the class is the xxxx group being dismantled and then being brought back together towards the end of the semester. It seems that if you wanted certain changes to be made on our project, they could have been done more smoothly and more thoroughly had we been a group for the entire year. Not only was it unfair to us but also extremely unfair to our "new" group. I felt that our "new" group depended a lot on us and to just have us cut out in mere weeks was really unfair. However, I do feel that although I was stressed out during this class, I feel that having our group project and our individual project at the same time was indeed a learning experience for our venture into the real world. Ultimately, I am glad that you had us give you updates or I would have never started as early as I did. Thanks again.

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This class was definitely the most difficult experience of my life. But I feel a great sense of accomplishment now. I had heard the horror stories for years about your class, and I always dreaded it. It wasn't as bad as everyone made it out to be. Of course, there were times when I was soooo depressed and burned out with school that I just wanted to quit, but I knew that wasn't an option. The class was very challenging, but that week before spring break was HELL. People were coming un-glued, including me. I actually got

physically sick because of all the stress that week. I couldn't eat. And I surely did not sleep. Not a fun experience at all. But it's over now. The rest of the course wasn't so bad. After spring break was definitely easier. Your class is the hardest on campus by far. It kinda feels good to know that I got through the hardest class in the whole university. Overall, there was mucho drama, depression, anxiety, anger, and a variety of other emotions, but now I feel overwhelming happiness. I think this class made all of us closer friends (except for those few who didn't contribute anything) because we all went through this tough experience together. You should keep this new format of the class. I think it's a fair system. Not easy by any means, but fair. Much fairer than previous year's systems and I thank you for changing it for us. I guess that's all my thoughts for now.

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I'm sure you hear this all the time, but i am so freak'n glad the semester is over. I hated capstone and all the BS work we had to do. It was especially frustrating to see how we had so much more to do for our capstone than every other engineering major at OU. I understand all the work that had to do with the group capstone project, but i think the addition of the personal project was terrible!! I dont know anyone in the class who thought it was a good idea, or a good use of time. Anyways, its done, and hopefully you are passing me, so i wont have to worry about it anymore. Also, i thought the last lecture was very boring and do not think it was necessary that all of us attend. Hopefully we did not drive you crazy, and if nothing else, you got some entertainment out of us.

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**In my experience, there has been no class that is this time-consuming, this requiring, and stressful. However, there is a lot to learn from this class. I wish I had more time to focus more on this class. For the last four weeks or so, I spent only three hours/week for all other four classes I am taking so that I can focus on this class. The department should notice all the juniors about the amount of work in this class so that they can plan to take fewer class in the semester with capstone.**

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I liked the class. I think that it improved my ability to work on a project independently and with a team. It was challenging, but you kept us motivated. I think this class made me a better engineer, but I am glad it is over because I have not had any free time since it began. One thing I would change is the consistency of the class. For example, if it is said in the beginning of the class that tests may be retaken for an improved grade, then that should happen.

Thank you for this semester. I hope you have a good summer.

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Things to improve/keep from class: Future classes should get more exposure to GAMS and working with risk analysis (perhaps some take short home exercises to practice with before assignment 2).

You should also inform classes about the ability to connect to the Virtual Lab (<http://coecs.ou.edu/support/terminal.htm>), for people who don't live near campus, so they don't have to visit the computer lab so often, as well as connecting to the VPN (<http://soonerconnect.net/vpn/>) for students who can't access the Virtual Lab because they're not on campus, so that they can. If nothing else, it should lower problems with people not having access to a computer if everyone procrastinates.

The virtual lab currently has GAMS, Control Station, and Pro II, but does not have Excel or @risk/CrystalBall. It would also help to see about getting those installed in the virtual lab for those future classes.

The review sessions before exams were useful, and if they're not a regular feature, I would recommend keeping them for future classes. They were very appreciated.

The one thing that I do really hope is that for future group projects, you also request schedules so that there is schedule compatibility and the situation between xxx, yyyy and I doesn't occur again.

Oh, and if you can make the TA information a tab in your website, rather than a footnote of the image, that would also help. I didn't even notice that link until someone pointed it out to me, and it's best not to have to rely on others to find information.

Group Project Comments: I'm not as satisfied as I had expected, as the combination of being sick over the weekend and then working on the entire report (reworking some of Giang and Vicente's sections) and making corrections to some calculations, all resulted in me only getting to do one of the calculations you wanted me to do.

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From this semester, I have learned a lot about myself. I don't know if it is simply senioritis or learning what is important and how to manage life, or perhaps a combination of those things. For the past few years, I have been trying to accept the fact that I am just not the smartest one anymore. AND for me, that was reality, but hard to accept... took me 3 years to accept it. This year, especially this semester, I have been able to prioritize my responsibilities and accept the consequences of these actions. For the reports, quizzes, and assignments, I always know that I can do better. But, if I have taken nothing more from this semester, I have learned that it's not always as important to give the absolute best you have, but to give the best you can offer in what circumstance you are in. For myself, I have loved the opportunity to coach my soccer kids, work, and still enjoy a life outside of school work. Sure, I think giving up some of these activities would have allowed for more time devoted to school work, but I look back now and know this is the

balance that I chose. (AND for me, I think this is a good step, a great moment. In the past, I would have never gone out, or committed myself to extracurricular activities. I feel free-er now, and I feel that I am in control, and I am making the decision. (not to say that I haven't pushed myself. I have felt pressure and have been stressed at many moments throughout the semester, as you should know. But more importantly, I know more about my capabilities and capacities.)) Since I have recently gotten a job offer which I am still seriously considering, I value my time even more. If I didn't coach or spend time with family and friends, I think I would have regretted it because I don't know if I would have that chance again. However, I am still proud of where I stand. Since I still want to go to medical school, I obviously still care about the grades I get in my classes. However, I think I gained much more than just grades. I have gained a depth of self understanding and acceptance.

For improvements for this course, I think that the syllabus should be written out more directly. In the syllabus, it should say more specifically where each point or percentage will come from. With so many grades (quizzes, assignments, indiv projects, group projects, and progress reports), it is difficult to know exactly where we stand in terms of our final grade. (for example, what percentage of our project grade will be dependent on the individual project? group project?) Also, I would like to know that the grades are done fairly. AND sometimes, it seems unclear if everyone is deserving of the grade they received.

-but I don't want to get involved in this jungle of a matter because it is not my place to say who should get what grade.

Other than that, I don't think I have the opinion of most of the other people in the class. I really thought this course challenged me and showed that I was capable of doing more than what I initially thought. While it was no easy task to be a perfect student (in my standards), I liked the fact that I was constantly pushed to do more and to be better. Within myself, I have always known that I am smarter and more capable than what anyone thinks of me. This class is just one more thing that confirms that this is true. And I think that decision in mine to take on whether I need to push myself to the limits.

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My overall impression of the class was that it was more difficult than really necessary but I did learn a lot. I think that the most important thing learned was how to teach myself what I needed to know. It was really a sink or swim situation and I do feel a tremendous sense of accomplishment for finishing it.

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I feel that the class as a whole was okay. I did not like all the tests over the classes we had had in the past. I think it would be more helpful to maybe have a few classes dedicated to review for the FE exam. I took the FE without even reviewing anything, mainly because there was never any time to, and feel like I did horribly bad on it (course

it doesnt really matter for me, but it would for other people continuing to work in the chemical engineering field and may one day wish to become professional engineers).

The homework was okay, but as you know I didnt like doing any of it because it is not relevant to anything I will do in the future with Medical School, so i think my opinions on that matter (Pro-II and gams) should not be really taken into account.

The only thing that troubles me is that alot of people still do not have jobs, and just because our capstone is considered "one of the hardest" doesnt seem to be helping. I dont know if this is just those individual people are not good at looking for jobs, or that our department doesnt really actively pursue jobs for our undergraduates, or what. It seems like one helpful part of capstone may be to have a separate individual working for CBME and have their sole job as an employment seeker for our undergraduates, helping them with interviews, etc, etc. I'm sure that would be helpful to everyone, since I hear career services through OU is a joke.

Anyways, this class wasn't as hard as all the last years seniors were telling me. I never felt stressed ever because I tried to do my work throughout the semester instead of the few days before things were due. I'm happy to be graduating and ready to start med school, but not till after a summer of sitting around and doing nothing!

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**For the most part, I think this was a good class. I feel like I learned a lot, and I especially liked my group project. However, I think there are a few areas of the course that could use improvement.**

**First, the quizzes were OK for the most part. I think the content and grading were reasonable. However, I think that the heat integration quiz was unnecessary. I would have preferred to review heat transfer or kinetics at that point, especially since this quiz was not long before the FE exam. The other quizzes covered much more pertinent material, and I think they were more beneficial.**

**Next, the personal projects were not a strong point in the course. I would have rather invested the time I spent on this project in my group project. I felt like I did not have enough time to really do a good job on this project, particularly doing it by myself. My personal project was easily something that could have been expanded to a group project. I understand why you have the personal projects though, as they give people who are struggling on the group project a chance to redeem themselves. However, it seems like the group projects should be the main focus of this course, and having to deal with the personal project does interfere with working on the group projects.**

**Finally, I think that the performance evaluations are too vague. I'm not complaining about my grades on them at all, but I have heard others complaining about them. I'm sure that you have some numerical system for computing them, so**

**maybe if you posted that on the gradesheet online it would clear up any confusion. However, I do appreciate having a few more grades under my "project" grade category, so the performance evaluations are positive in that respect.**

**Thanks for all your hard work teaching the class this semester.**

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**Your course was good. I don't think the homeworks were necessary in the course, with the group and personal projects there is more than enough work to get done.**

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Well, it's been an adventure. I have learned a great deal about myself, my potential, and what I can accomplish. I am very happy about the way you have set this class up compared to last year. But still a lot of hard work that prepares you for the real world. If one could manage to survive this class, then they can face any difficulty in the work environment.

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Overall I think that this class was not what it was built up to be. The seniors from last year embedded in our mind that this would be hell. Yeah, it was bad at times, but it definitely wasn't hell. I did enjoy my project and my group so maybe that's what made it easier for me. I'm sorry I let you down towards the end, but I still am proud of what I contributed to my group and the class.

I didn't like the breaking up of groups half way through. It's unfair to both sides, since the broken up members must scramble to catch up with others and the maintained groups must fit in new members and give credit to others who may not have worked the entire semester like they did. I think it would be better to draw out one big project over the semester. I also do not like the personal project, it definitely was hard to juggle with all the other projects and classes, and therefore I know a lot of people could not put the right amount of effort into it. I think it is unfair to judge an individual on the personal project, because each project was different and people manage their workload differently.

I do enjoy the decrease in homework assignments. I also appreciate your dedication to our class and your extreme availability. I definitely am not walking away scared of you or your class. Maybe a little burned out ... but that's 4 years worth of school, not just this semester.

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The use of two projects at the same time was too confusing. I think too much emphasis was put on the group projects before the individual projects were introduced. Maybe if both the individual and the group projects were introduced at the same time or if you

broke the semester up into two parts. The first half have group projects and the second half have individual projects.

I like the use of reviews for the quizzes, even though they did not help me. They helped focus attention over the broad areas of information.

Early reminders to start the HW would help students understand how much time the assignments will take.

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Well, I'll start in reverse-alphabetical order and list the good stuff first.

1) I think it is fantastic that you arranged the schedule so that all homework was due before spring break. I don't even want to imagine what it was like last semester, scrambling around to finish projects and presentations and still have to worry about fighting with GAMs. If nothing else, I would think that homework grades would suffer if the assignments were due at the same time of our final projects.

2) My classmates would probably string me up for saying this, but I honestly liked having the quizzes over the subjects that we'd studied before. They helped us refresh our memories on all the important points; they weren't so detailed as to be a complete rehash of thermo, separations, etc., but they did cover all the important points. I even wanted to say that I felt they helped me during the FE, just because all that stuff that I'd made and effort to forget was brought back to the forefront of my mind--I probably wouldn't have remembered any of the info hidden in a McCabe-Thiele diagram if I hadn't studied it for your class.

Hmm, bad points--only one of those, I think:

1) I have to say that I think larger groups for the projects was probably a better system than the small ones from this year. It's just that the level of detail expected from them doesn't lend itself very well to such small groups. More importantly, I think, is that in small groups, if one person doesn't carry his/her weight, it's much more keenly felt among the other group members, and only ends up hurting them more in terms of grades. If the groups are larger, at least the others can provide a bit more insulation against one person slacking off.

I have to list my feelings on the personal projects in their own category, because I'm a little ambivalent about them. I'm torn--I really like the theory that we had the chance to show you what our own work is like, to show you that we can work alone and, if our group projects seem lacking, you can see from the individual work where the blame for that lies from the quality of the individual projects. However, while the theory is good, I'm not sure if it worked in practice. I know, from both others and myself, that between the group and the personal projects, one of them invariably suffered. With all the work on the group projects, a good many people slacked off on the personal projects. Other

times, because people were concentrating on their personal projects, work on the group projects ground to a halt, putting them a bit behind during those last few weeks of work. I suppose whether or not you choose to keep them in the syllabus depends on the quality of work that you got his semester--if the projects were still strong despite our problems, then I guess they worked out all right.

I think that covers everything. As far as the class format and syllabus is concerned, I don't think that I have any real problems--my issues stem from arrangement and management, rather than material and teaching. If nothing else, after this, my first year of grad school should be a piece of cake; I'll have a great time making fun all those little biochemistry weenies who whine about all the work they have.

Well, I guess that's everything. I don't have any profound insights or anything--I'm just tired and want to have a nice, leisurely summer, and I hope that you enjoy yours too.

"Ambition is a poor excuse for not having enough sense to avoid work."

Guess I'm not too bright, huh? Oh, well.

It's been an experience.

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I really liked my project and my group. The group projects are great because it allows us to tackle a very challenging problem with only a semester's time.

I think the personal project should be eliminated from the course. There's simply too much to do and not enough time. The personal project definitely suffered because I was working on the group project and homework. I think having "two" projects was good idea. It forced everybody to have made very good progress by midsemester. If a project wasn't working out or a group didn't like their other group members things could be changed.

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Although I have mixed feelings about this class, for certain, I've learned one important lesson: Life is Unfair.

This class has taught me many things. I have learned that there is always room for improvement and change; however these things only matter to the extent that you allow them to. I hope that as a student, I have taken all the important lessons that you as a teacher has provided. I know that you would like to receive all the information that I think is important to the future of this class and department, so I've outlined different area and my thoughts on them.

**Projects:**

I still firmly believe that each project had a good intention, and was supposedly set with the same level of difficulty. I do believe that in order to make the projects better, the difficulty and scope of each project should be continually reassessed throughout the semester. This will provide a good grading ground for each group. I also liked the idea of smaller groups. I think ideally a four person group would work for each project and would provide a fair workload for each member.

If you would like to have a two part project, the first deadline should be a week or two before spring break. This provides a more even balance for the first part and second part of the semester. Regarding the dissolving and reforming of groups, if a group is dissolved, they should all be made into a new group. Members of previously dissolved groups should not be added onto group. Many of these people are getting a second chance to prove that they can work. When members were reassigned to already formed groups, they went with the excuse that they don't know enough, and just let the original members of the group do all the work.

**Individual Projects:**

The individual projects were a great way to gauge each student's capability. Although it never seemed that there was enough time to complete them to the fullest extent, I do believe that the individual projects are an integral part of this course. It did seem that some of these projects had the same problem as the group projects. The difficulty level for each project greatly varied, and when selecting projects, the difficulty should be closely related.

**Homework:**

The homework was helpful and did allow for students to get a good range of understanding different engineering tools. This is helpful because it showed how to take on small projects. I think that two homework assignments were reasonable, and even if there were three, it would not be a huge deal. It was also good, that students were expected to do their own individual work. That is the only way that would force some people to really sit down and understand things.

I do believe that some of the lecture time could be used to better explain the engineering software tools that we were expected to figure out. Many class times were cut short or cancelled and instead could be used to teach GAMS, Pro II, SuperPro, basic programming, and other tools. This would build a great foundation of each tool and allow students to explore the depth of each program.

**Advice For Future Students:**

What you get out of this class is what you put into it. I know that as students this is probably what you've heard a hundred times over. This class is tricky, in that the more you give, the more you will have to give. There are ups and downs in this class, and it will become a large part of your life. Remember through it all there is an end, and whether good or bad, you will survive. Try your best and that is really all that can be

asked of you. When you are in this class, don't live up to someone else's expectations, life up to your own. Remember to take breaks, get rest, exercise a little, and when times get really really bad, give your mother a call.

Quotes:

"In the past, those who foolishly sought power by riding on the back of a tiger ended up inside."

--John F. Kennedy

"I may not have gone where I intended to go, but I think I have ended up where I intended to be."

--Douglas Noel Adams

"All scholarship, like al science, is an ongoing, open-ended discussion in which all conclusions are tentative forever, the principle value and charm of the game being the discovery of the totally unexpected."

--Hugh W. Nibley

Things I've learned: You can only be responsible for yourself, the only thing that matters is if you can live with what you do, and it truly isn't over till the fat lady sings.

I want to thank you for making this class enjoyable for me, for challenging me, and for showing me what I am capable of. I enjoyed your class. The whole experience and I honestly do believe that you are a good person and a great teacher. You have to roll with the punches, if some stuff doesn't turn out right (i.e. group dynamic), it is part of the experience. I hope that I got all I could from this class. I know that the lessons I have realized, will have an immense impact in my life.

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Just one thing that I want to mention that is about the group project. Changing the group members on the second semester is a good ideas because the new ones will have the new ideas for their group. However, I will have less time to read through the project's information and will be left behind their group.

The homework as well as the individual project are good. But I prefer more homework than the individual project.

I hope my thought will help.

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