Finally ... the good, the bad, and the ugly. The good has been the quizzes ... it might be a good idea to have quizzes that retest your knowledge of material in ALL cheme courses. Also good was the meetings with you ... there was certainly an attempt by you to make certain every person in your class was making progress on the projects, and I appreciate that.

The bad ... I really don't think one class a week worked for me so well ... there is just SO much information to cover and so many things to do that a second class during the week would be a great benefit. I try to check my e-mail every so often, but there are times I simply cannot take a look at anything sent to me over the course of a week. Maybe I should try harder? That might help, but a second class would also be helpful to spread out the wealth of information that is currently being given to me in one lecture per week.

The ugly ... my homework grades. I'm working on that, though.

On another note, I feel this class went a long way in preparing myself and others in the ways of chemical engineering. I felt it to be terribly demanding early on, but have grown to appreciate the work load to some degree or another.

As to quizzes, all people have been complaining about that, but I think they help us out to realize where we have weak points and work on them to improve them, so that why, I think they are fine, and the other thing is that they were just basic concepts.

Do not let anyone let you change this course. Maybe it's just the afterglow of the senior banquet - all the bonds that have been created by this class - I don't know.

The good.
How the workload causes pressure. How the last three days of the project are the hardest three days How we never had to go far or wait long to get project advise

The bad.
Well, I'm now addicted to Mountain Dew and my sleep cycle is gone to pieces. That's bad. I do not feel Chem E adequately prepared me for Law School... Oh, wait... I kicked all those history majors and political science majors butts on the LSAT. I guess it did!

The ugly.
Really, Dr. B.  Hindsight is almost 20/20, and I know I'm not far removed from this experience, but I'm already glad I went through it. I was talking about the class to a Junior and basically told him that the rite of passage is really worth the pain - it is. The class doesn't really need to be easier. It would be a sad day if Capstone wasn't feared anymore. But something about conquering this gigantic obstacle really gives you a sense of accomplishment. "Walking" on May 10 will have nowhere near the significance as the moment when we answered the last question in our presentation, people started clapping, and we knew that we had successfully completed this course. Don't let whiners weigh it down.

- this is the only class where I actually felt that my opinion mattered, being in the group or in class
- your bluntness and no-nonsense approach was extremely helpful in the fact that we were never mislead

A few things I've learned because of your torture...just kidding:
- never take anything at face value, find out as much as you can about your source of information an how they got to their conclusions
- always cover your behind
- explore all alternatives before deciding on a solution
- be diplomatic, not defensive whenever your work/decisions are being questioned

This semester has definitely been tough, but I really feel that it was worth it. I have learned so much. Not so much from the quizzes or the lecture material, but more so from research for the project.

The Good
I really enjoyed my group and what we did for the project.
I appreciate how you were willing to help at all times and make sure everyone was contributing to the project. I liked how class was only once a week.

The Bad
Completing the large amount of homework was stressful. The lab was always noisy, impossible to work in, dirty, etc. More preparation should have been given for the midterm.

Overall, this has class has exceeded my expectations. Thanks for everything.

Good - The time you make available to students. The reading assignments. These help out a lot and make the lectures shorter and more straight to the point.

Bad - I don't really like the peer evaluations. I think you should try to implement some other system to determine the amount of work done by the group members. Also, I think it would be better if you would be more specific on what's going to be on the quizzes. Rather then just saying "study thermo" tell us what we need to study.

Ugly - You need to be harder on next year's class. If they aren't going to have to do the homework, then they should all have better projects than us.

Things to change- having journals due friday at 5 when you must wake yourself up after every typed sentence. homeworks are good content and gratifying to actually complete but way too time consuming. The project components should be a little more standard, some groups do twice the work. I think there needs to be more software applications in previous semesters (pro2, programming, even excel).

Things to let be- people critize the quizes but its important to remind us of how incompetent we are. project setup isn’t that bad.

The semester is almost over, I just recognize how much the class benefit for me. The good things are project required lot of work, and I can get used to it, the quizzes reminded the previous classes materials which we should remember somehow. However, I don't like the homework. I think it should be much better if you delivered one homework problem every single week. That would make me feel less stressful than only 4 Homework with alot of stuff to do. Thank you very much for being always available to help us (although sometimes I had to wait an hour in a long line to talk to you).

Well, it’s finally over. It was fun taking this class with you, Dr. B. I think I learned a lot. Even though, we bitched a lot about the load of this class, but still it was by far the best one I ever took.

Anyways, as good time as we did. And, you will always be remembered.

Today is Friday, the last day for the report, project and this class. I would say I will be missing this class a lot after today. I make friends here, I learn the new stuff here and I like this class alot. Working in the group the whole semeter intensively helps me to practice the teamwork skills. I know these skills will be useful in the future for all of the students who are going to graduate today. I like the rule of " not saying having no time for the project" that you always say to us. When I think of that, I think of the better way to handle the situation regardless of how much time I have.
Your class was a lot of work and very challenging. But, I feel that I have learned a tremendous amount, and it has really tied the entire curriculum together. You have done an excellent job keeping the class motivated, interested and positive. My group worked very well together, and it appears that overall most of the groups did too. In the past, I have carried the weight of other group members. It was great working with people who are all working with the same goals and priorities. I have learned a lot from the group work itself. Thanks for your hard work and great instruction.

I won't lie, this class was hell. I'm sure that it helped me a lot though, except for my other classes. This class gave me no chance in my other classes. I enjoyed your help and your mentoring. I think that you're a real good guy, even if you don't admit it.

I really liked working in a group. I really enjoyed learning about trash. I think this is one of the most important things that I have done. I have never had a year long project and it really taught me how to be dedicated. I also think that the homeworks were helpful. But, it was a little overwhelming at times. I thought that learning this material was very helpful. One thing I did not like was some of the problems in the group. We seemed to just stay to ourselves at times and I think that we should have worked more as a group. It seemed like we had meetings and did not accomplish things at times. Things were really complicated at times. But overall I think that this class was very good. There are other things that I would change, but I am pretty sure you already know, and you don't need me to repeat that this is a lot of work.

Problems or Concerns/ Achievements or Success

-I would say this class has been the greatest class I've ever had. Due to this class, and the instructor, I am more confident in my ability apply what I have learned. Although my grades may not reflect this, I feel I am able to work harder as well as understand new learning material. I appreciate the hard work the professor and his staff have put into this class, as well as the encouragement that has been given to me and my fellow classmates along the way.

the good
-teacher and student contact
-challenging, makes one feel if they can do this they can do anything --subject matter is fascinating
the bad
-not enough time spent on optimization and new material outside of project -non equal spreading of knowledge
-professors office is to far from m206. needs a waiting room or an availability light in m206 like bathroom lavatories have
the ugly
-m206's floor before they started mopping it.

You already know the workload is to large but i'll concede that i really did need all the homework excercises. Except instead of homeworks they probably should have been refered to as side projects for the amount of work they originally entailed for those who were ProII ignorant at the start of the class. Clearly, everyone needs more exposure to both GAMS and PROII before we tackle them in this class. As for the rest, the group meetings with the professor were an excellent way to keep on task and get constructive criticisms of both the project and presentation techniques. I learned a lot by watching michael learn how not to talk too much, which he did an excellent job of on the final by the way.

at this point in time thinking is a minimalist activity seeing as experience has met the threshold, if not beyond.
>the good (what need to be kept as is)
big focus on project, biweekly meetings, optimization and business. review of everything with quizzes.
>the bad (what definitely needs modification, I already stated some like peer evaluation)
more talk about the "real world" like what to tell your boss or not, how to. The unspoken things that are expected of you, besides all the technical. why engineers get hired, fired, promoted....
> and the ugly...
after sleeping on the couch do you expect us to still look our best.

The Good...
The projects, and what is required regarding them.
Your availability to the students.
Gourmet coffee in M206.
Shane S believing in me, and making me want to be that good. The green couch. the members of Group 9.

The bad...
The workload out side the projects.
The quizzes on classes we had three years ago.
the ridiculous length of the homework.

The ugly...
The likely hood that the majority of us will never see one another ever again.

I want to tell you how much I have appreciated the way you have treated us as students this year. The fact that you care about how we learn and ways to improve teaching has great value to me. I appreciate how you do not insult us on what we do not know but rather encourage us to think. This class has been stressful to me but now that it is finally over, I realize how much importance it has and how it will better my industry experiences in the future. I hope that you have enjoyed us this year and I am happy that you feel so proud of us. Thank you for being such a great professor!

Before I go into the good, bad, and ugly, I just want to give you an overall comment on your performance. I can't begin to say how much I have truly appreciated your effort in bringing out the most in us. Never before, have I ever had a professor that put out as much effort as did the students. Apart from that, your encouragement was so very helpful. I am very, very, very thankful for all you have done. Thank You so much.

Good
The Professor, and my group. Loved the whole group project. Although, it was difficult, I really enjoyed working on it. Bad: Peer Evaluations, and the long, hard, homework assignments. You might even want to consider taking out the test and doing more evaluations of the papers and presentations. Ugly Nothing

The good - Your relations with the students, always motivating to push students to their limits.
The bad - The three grading policy where the worse grade is the grade you receive. I understand the philosophy, but I feel this approach is not the best.
The ugly - The peer evaluations. You already said you are going to scrap them though...

The Good:
1) Quizes- At first I didn't like them, but after a while I how realized how important they are. They refresh your memory on alot of old material that I lost track of.
2) Reading Summaries- This was an effective way of the material sticking in my head, especially since you went over it again in class.

The Bad:
1) Trivial Project Tasks: I didn't think it was important to have 6 page summaries. I always thought that if people wanted to know about our report they could read it in its entirety or just read the executive summary.
2) Test: I thought the test was unnecessary. I think if you do well on the homework thats a good indication that you understand the material. Of course, my test grade will probably show otherwise.

Improvements or Ugly:
1) Presentations: I wish maybe that you would have been a little bit harder on us during our private meetings just so we would be a little more prepared for the final presentation. Overall, I thought the meetings were very beneficial, but I thought we could have been questioned more.

Overall:
This is a class that I am proud to say I finished (hopefully I passed). I learned alot, I just wish I had done better on my final presentation. Thanks for your dedication and enthusiasm.

Finally, we are done. This semester has been a very long road. Its very hard to believe that it is over. I have learned a lot during the semester from this class. It has allowed me to see how everything fits together. It has given me valuable team work experience that I have learned from. It has allowed me to relate a lot of things learned in class to real world experiences. I have learned a lot about myself through this experience. It has given me more confidence than I have had before. I also now know in what type of situations I work best, and what my limits are. A grade given in this course will not reflect how much I have learned and will take with me from this class. (Especially that test)

The project helped to broaden my perspective on real world processes, and on how much detail is involved in things we take for granted. It also allowed me to see that there are many more relevant resources than those found on the internet.

I thought this semester was definitely the most challenging, but it was well worth it. Before this semester I questioned becoming an engineer in the real world because I didn't feel prepared. After this course I definitely know that I am ready, not because I know all of the answers but I do know how to find all of the answers. This suggestion may be a stretch but I think the class should be spread out over the entire senior year. It will be hard but the preparation is priceless. I think the peer evaluations may be better if you had a rating system not with numbers but with words, (like works all of the time, never works, etc.) I feel like I am not able to give people in my group more points because I don't have any left and not because they did an awful job. The project was the only responsibility that some people in my group had and it's not fair to give the other people lower scores just because someone spent every waking hour on the project. To me the current evaluation system suggests that some people worked hard and others didn't. I also like you and Dr. Lobban's teaching style. I doubt I'll get an A in either class, but the teaching style made me learn and have an understanding about things that other classes did not teach me. I think a year long class would allow for more material to be reviewed that fell by the wayside in previous classes. Also, if other ChE professors gave us 5 challenging homework problems as opposed to 20 "busy work" problems more students would definitely learn the material better rather than regarding the assignments and course contents as busy work.

Sorry it got so long-winded! But I had an awesome semester and did more work than I ever thought I was capable of doing and I am so thankful that I did.

I think that you have done a wonderful job for the semester. I attended the last four presentations and I think that they all have done a great job. Personally, I don't think any group can do that group without you guide and advice throughout the semester. I kind of regret that I did miss some of the presentations/. Pushing students is one of your strong point. You are really good at it.
The project requires a tremendous amount of time, but it is extremely helpful, both to our understanding and our skills. The homework does help a lot too.
The only thing that I think should not be there is the exam.
I really thank you for all the time you have spent for your students. I am staying for my Ph D here at OU, so hopefully, I will have the chance to take some of your courses in the future time.

I can't believe this is the last one...makes me sad...at the beginning of this class i thought you were a brain eating monster(HAHAAH)...not that i think any different now but i understand why you're like that, for our own good. I think i learnt more about myself from this class than any other. I know i can do whatever i want if i put my mind to it. Thanks a lot.

The Good: Optimization Principles, Simulation Principles, Real Life Projects, The final presentation format, Bi-Weekly Meetings with you, Peer Evaluations
The Bad: Give more explanation on what is going to be cover on a quiz. Reading the Thermo book is not good enough.

I am glad this semester is over, maybe I will see my wife for more than 2 hours a day. I enjoyed you class very much, your style of teaching is very helpful to students who really want to learn chemical engineering.

Despite the hard work this class entailed, it was a good experience. There were times when I wished it was all over but ultimately it taught me about time management more than anything. On the technical level, I learned to apply and tie in concepts that I had learned and forgotten over the 4 or so years that I’ve been at OU. I’m not so sure about the quizzes though, I guess the part that was most valuable was the thermodynamics part since we’re forever going to encounter it. Maybe the format for the quizzes should be changed. Maybe there should be a brief review the week before each quiz (or would that be too much?) the assignments were very challenging, lengthy, tedious (I could go on), but ultimately valuable. Maybe the number of homework should be reduced to lighten the load.

At first I didn’t think the journal I had a point, but when I think about it now, I see that it makes you seem more accessible and approachable, like you care about what we’re doing and going through. That’s really good.

Overall, as I said earlier, it’s been a class with ups and downs. But I enjoyed it (maybe not every minute of it). But you’re a great prof. Dr. B.

I think I’ve made clear by now what exactly I don’t like about this class. It’s the grading policy. I still don’t understand your reasoning behind it. Someone could have the best project and the highest number of credits in the class, but then do poorly on a few quizzes and mess up on the test and get a B or even a C in the class. It is ridiculous! I have never in my life seen a grading scale like this, and the reason for that is that it doesn’t make any sense! Also, you should tell your students next year that they need to keep an electronic copy of every reference they plan on using. You mentioned keeping our references in a portfolio (which I have), but you never said anything about keeping them electronically.

I don’t know exactly what you want for the ugly. I think you should keep the homework as a part of the course. I think if we had to deal with it, every chem e should. I also know a lot of students in the junior class who are taunting us about possibly not having to do any homework. It would give me so much pleasure to know that their class would have to go through the same torture we did.

Capstone is a good experience, it will get you ready for the work environment. There were some things that I liked and some that I beg to differ from. The first thing that that was good, was your honesty to every student. An example is me. You told me that you felt that there was a problem in our group and you told me what to do to correct. The communication with you really help me a lot. I valued that. I could come to you if I was having problems with my programs and other thing else. You challenge us everyday, not just once a week. You kept us on our toes with a few quizzes, homework and our projects. You didn't let us get to relaxed and not work our brains. I also liked the fact that you were understanding when it came to homework, when you extended it to be turned in later. Some things that I think that need to change are the work load of homework and peer evaluations. The homework can be a big problem when you are trying to put all into your project and you have just as much work to put into it. Peer evaluations need to formulated a different way. Everyone doesn't get there sufficient credit. I changed my whole attitude and work ethic after my talk with you and my group for example. I never looked back. I didn't miss another meeting and I was always working on the project or trying to help someone else. My group saw.p a change in me and you did too. Overall I believe the experience is valuable and can help you get ready for the work environment. It has help me with school and work. You look at things a a different perspective. In group you really need to make a good impression so you gain respect. With respect you get communication, and that is the key. If you can communicate then it will be a whole lot easier to work with people and te success of the project. I have enjoyed the class. You are a good professor.
In spite of the tremendous workload, I know that this was the most beneficial course I have ever taken. I truly believe that things don't need to be changed necessarily in this class (content-wise). Instead, changes need to be implemented in our previous courses. The other chemical engineering courses need to have more real-life application aspects to them so that students are not so overwhelmed with applying this knowledge when they get to their projects. I feel it would also help - with regards to the quizzes - if the other classes had "mini-projects" which integrated ideas from the previous courses as we went along.

With regard to the capstone class only -
I believe that it is important to incorporate all of the material that we cover. The whole point of the capstone is to tie everything we have learned together, which this course does a good job of doing. All aspects of the course are important - quizzes, homeworks, and the project.

I don't like the peer evaluation system. I think that a form like the one used in the unit ops/design labs is better b/c you have specific questions to answer and you can give a better evaluation of your peers without worrying that everyone won't be accurately represented.

I think you should have the first peer eval due earlier in the semester. After our first one, I could tell some difference in one of our group members due to your conversations with him. However, by mid-semester it is already difficult to make up for such a slacking.

I don't like the test format. I feel very unhappy with the test for this reason - I worked very hard all semester, did all of my own homeworks, and studied for this test. However, I am slow with Pro2 and also do not perform well under that much stress. I do not feel that the test is particularly indicative of my knowledge and/or capabilities. I am upset b/c I know that this is weighted more heavily than my quizzes and I don't feel that I did very well on it.

I still do not understand the grading policy - that our grade is the lowest of our three grades. I understand your logic behind it but it is impossible to perform equally well on all three fronts in this class. I do not believe (and I could be proven wrong someday, but from what I've seen in the workplace I doubt it) that there is that much stress at any job and that it would be much easier to perform well in all aspects of one's career.

I appreciate your enthusiasm and motivation. One thing that could make this whole experience completely unbearable would be a professor who seemed to totally not care about his students at all. Thank you for all of the hard work you do all semester and for forcing us to go through this. I know that I will be better prepared for the real world because of it. And, I cannot be too bitter because, after all, I lived through it! :)

Good things about this class:
The project served its purpose very well. It was a good way to develop leadership and critical thinking skills as well as helping us to deal with open ended situations where it is difficult to find information. Also, it developed technical skills as well.

I also think this class tied all of our previous classes together into one cohesive bundle of knowledge.

Bad things about this class:
I know you hear it all of the time, but my only complaint about the class is the workload. We have heard how the curriculum might be changing in the future, and I think it would be a very good idea to split this class into two classes. A lot of the time I had so much stuff to do in this class the sheer frustration from having so much to do kept me from being productive. But, I learned to deal with it (Does that actually make it a good thing????)

Overall, I think this class has been very valuable to my education. I am feeling a huge weight lifted off of my shoulders now that it is done.
I really liked having the bi-weekly meetings as well as the journals. I think these meetings ensured that any problems could be caught in time to make appropriate changes. Also, these meetings helped everyone keep up with each others part of the project. Sometimes I would get so involved with my part that I had no idea what anyone else was doing. It was good that we had to brief each other before and during the meeting, so that everyone knew what was going on and where we were headed. It was also very helpful that you were always around night and day to help us, although sometimes the line was long, you never turned anyone away, no other professor has been that available.

However, I didn't like the homework being combined with the project. Its not that the homework wasn't something good to do, but it should be its own course ( or something), not combined with the project. I enjoyed working on the project, but having the extra burden of these difficult homeworks didn't add any productivity to my day. It was also difficult sometimes to work in the lab, too many stressed out people, too few computers, way to many things to do. I like it quiet and not crowded. The peer evaluations also didn't seem fair to me.

As far as the "ugly", I guess this semester left little time for anything other than this class. I know that we (most of the students) did lots of work for this course and most of us abandoned other things lower on the list of priorities. Its hard to establish some sort of time management, when all your time is realistically spent doing one thing, and you barely have time to breath. I have a hard time truly focusing on over three things, and hopefully I will get better at 'juggling' my time.

All in all this semester has forced me to grow up even more, work hard, and realize that we can do something difficult if we really want to....