

MEMORANDUM

**Seymour and Esther Padnos School of Engineering
Grand Valley State University**

DA: January 7, 2004
TO: Engineering EGR 290 Co-op Students (1st semester Co-op Students)
FR: Dr. S.T. Fleischmann, Faculty co-ordinator for Co-op
RE: **Academic requirements for Co-op EGR 290**

Congratulations to each of you as you begin this adventure in learning known as co-op! Working engineers and your own colleagues (students ahead of you in the program) continually reinforce that this really is an important step on the road to becoming an engineer.

There are a few academic requirements for this experience. You will earn a letter grade for co-op which will depend on your employer's input as well as these requirements.

First, each of you **must be registered for 3 credits of EGR 290**. This is important to you, to us, and also to your co-op company. If you have not registered for some reason, do so immediately. **Even if you are still looking for a placement, sign up for EGR 290** and continue to work with Career Services to find a placement; that way once you begin working, the paperwork for the course is in place. Late registration is very difficult to handle in the short timeframes of the spring/summer schedule.

You must send us a "chain of command" by Monday, January 19. This is your boss and your boss's boss at the minimum. It is important to you to be aware of this chain of command and to observe the courtesies associated with it as we discussed in the co-op prep class.

You must complete and send in a co-op confirmation form by Monday, January 19. This form will be required for each co-op semester and it includes contact information that we use when we set up the faculty site visit at the end of the semester. If you could provide an e-mail for your supervisor, that would also be appreciated. Faculty members make their own site visit appointments now and having multiple ways to contact your supervisor is greatly appreciated by the faculty. You may wonder why we require this when we do know where you are co-oping; it greatly facilitates the scheduling of the site visits. It also provides us with information about your direct supervisor – often we have a contact in a human resources department rather than your direct supervisor. Also many students will be assigned to a different supervisor in the company for different semesters. **Both the chain of command and the co-op confirmation are required early in the semester so it may be a good idea to send them together. Send this to Chris Plouff, Grand Valley State University, Career Services, 206 STU, Allendale, MI 49401. Because it is so important, a late or missing confirmation form will cost ½ of a letter grade.**

You will be keeping a journal with at least weekly entries. You may do this on the computer or in a special notebook. If you keep your journal on your computer at work please take the necessary precautions to keep it private. At the end of the semester we will collect the journals. Your assigned faculty member will read it, but other than that it will be confidential. No copies will be made, your employer will not read it, and unless there are extenuating circumstances, no other faculty will read it. This is really a record of your process of becoming an engineer. Write about how you are changing, who you admire in your new work setting, what qualities do you wish to emulate,....

You will be reading "The Unwritten Laws of Engineering". The books are available in the bookstore. **We would like you to provide us with a short (1 page) reaction to it.** Note that you will be using the Codes of Ethics at the end for your ethics case study.

You will also be asked to provide a 1-page summary of your first experience at the end of the semester. This will be kept in a file and may be made available to co-op employers interested in what a typical first co-op is like. Please hand in hard copy but also be prepared to send us electronic copy of this.

There will be a **mandatory evening meeting** at the end of the semester. Unless you hear otherwise, plan on meeting on **Tuesday, April 6, 5:30 p.m. in Design Bay of Keller Labs.** We will let you know by e-mail if this changes, so check your e-mail and/or call us by mid March to confirm this.

Ethics case study: You will find a short case study attached to this packet. Please read the case, respond to the questions, and be ready to discuss this at the evening meeting. We will collect your notes (they can be hand written and informal) so have them ready at the meeting to get full credit for the meeting attendance. We will have a few of you stand up and give a brief summary of your semester, but about half of this meeting will be devoted to small group discussion (led by faculty members) of the ethics case study. If you cannot attend the evening meeting you are still responsible for the case study. In that case we will expect a formal written reports from you. Restate the case and answer the questions posed. This will be **due with your other materials by 5:00 p.m. on Friday, April 16 at the end of the semester.**

All written materials (with the exception of the chain of command and co-op confirmation form) ARE **DUE ON APRIL 16 BY 5:00 PM.** IF WE DO NOT HAVE THIS MATERIAL BY THAT TIME (EARLIER IS O.K.) YOUR GRADE WILL BE BASED ON WHAT WE HAVE. IT WILL NOT BE AN "A".

Prepare to deliver your co-op requirements to: School of Engineering, 718 Eberhard Center

Or, Prepare to Mail your co-op requirements to:

*Padnos School of Engineering, GVSU
301 W. Fulton, 718 Eberhard Center
Grand Rapids, MI 49504-6495*

NOTE: Please Do not fax or e-mail these materials.

Best wishes for a successful co-op semester!

Ethics Case Study

This is a true story and involves academic ethics, however there are implications for professional practice. The names have been changed and the student involved has graduated.

The engineering course in which this case surfaced was one of those courses that involved using many design formulas that were very specific to the particular case under consideration. Rather than allowing an equation sheet, the instructor opted to have open book and closed notes exams. In this way students could access the resources of the text as they would in practice and the exam problems could be very realistic. One day a student asked a question after class and the instructor looked around for the nearest textbook to show the student where the relevant equations were. The nearest book happened to be Otto's book and imagine the instructor's surprise when the book fell open to an earlier chapter where posted homework solutions had been copied in reduced form and neatly taped to the text page. Upon further examination of the text, the instructor found quite a few posted homework solutions neatly taped in such a way that it would be hard to notice. When confronted with this Otto claimed to not realize that there was anything wrong with this however the faculty was very upset about it.

1. The faculty viewed this as a clear case of academic dishonesty. Our honor code states that an engineering student will not lie, cheat, or steal, or tolerate those who do. In what way was the honor code violated? Be specific here and also consult the rules of thumb on the back of your card.
2. What do you think the faculty action should be in such a case?
3. The faculty did respond, but what if they did not? Who would be hurt by a failure to respond and in what way would they be hurt?
4. What do you think would be an appropriate student response?
5. Students are preparing for professional practice. In professional practice and even as students they are bound by the codes of ethics adopted by the professional engineering societies. Take the ASME, IEEE, or SME Code of Ethics and identify any areas that might be related to a case such as this one. If this student was allowed to continue without any corrective action, would he possibly develop any character traits that could not be tolerated in the engineering community?