**Minutes for the joinCE/EEwrapsession for Fall 2010**

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**Ryan Munden, Jack Beal. Bill Taylor**

**Start time 10:50AM**

**Date 12/18/2010**

**JD: EG31; 43 students, 39 have already rolled over. Doug did an Ethics presentation this year. Average grade was a little better than a B.**

**Three or four students had issues with HW. The new Eidos discussion group was well used this year. Students helped each other in Math and Physics. The co-hort helped each other.**

**Suggest a discussion group for engineering. We cover the final in EG32, first thing, and this helps drive the lesson home. Several students need remedial math help (algebra). We need a placement test.**

**JB: There is a math placement exam available, but it is not geared toward engineering students. Students who declare engineering by-pass the math screening.**

**RM: Have an on-line math course during the summer. Use a placement test during orientation.**

**JD: Mc102 was unusable for 6 weeks. We had computer problems and HVAC system issues. We had no heat.**

**JB: You need to call security when there is no heat.**

**JD: The SOE network needs to have a firewall adjustment. Something prevents the certificates from being accepted. A good group of students.**

**PG: EE 231, Analog Electronics and Circuits; Lecture/discussion, 12 students in the class. Some students did not submit their HWs, so extra HWs were assigned. Attendance was very good (90%). Average was about a B. There was a midterm and a final. We cover the HW in the class. We had an issue with the book. The students felt there were not enough solved problems. A schaums outline was used as a supplement (which the students seemed to like). The level of material in the text was more advanced than we needed. We used some extra lecture sessions to resolve the issues of extra worked problems. We spend 30-40% of the lecture time working the problems. This really helped the students. Some students had problems with basic electricity concepts (i.e., ohms’ law). Students seemed motivated and the class was improved over previous years. One problem, students are not reviewing the lecture material before arriving in class. Schaums is now being added as a supplement. The classroom (in Bannow) was not a proper facility, and I had to change the class room at the beginning of the term. The course generally went well.**

**RM: There is a form that can be used to indicate the kind of room you need. You need to let Annette know.**

**JT: EE321; Electromagnetic Fields; This is a lecture-oriented class. We do every problem in detail. This year we used the internet and videos. We also used FEM-on-line (which I use at work) and the students like this. We modeled electrical break-down problems. Students were very good with the homework and attendance. Students volunteered to work problems on the board. One problem with this course is it is 4 hours (6pm-10pm). Some students find this objectionable, but others have problems with splitting it into two sections (because of the commute). This is too much material for one course, we need to split this into two courses to run the course at a more comfortable pace. I had an exchange student who did not have money for a textbook. I gave him an earlier edition of the book and gave him assignments from the book. This student eventually had the highest grade in the class.**

**This course uses math, and students have problems with math skills. We need to make sure that students have good calc skills. Some students did not have basic Calc I knowledge (did they forget?). Vector calc is a requirement for the course. Students need divergence and curl and they don’t seem to get it. These are transfer students who have had calculus elsewhere.**

**BT: Please give me a list of the students, and I will look into the problem.**

**JT: It seems like the students did not understand the basics physics of electricity (Ampere’s law). This is typical of the transfer students. Perhaps a refresher course is needed. The Grades were Gaussian in distribution (A-D) some very strong and very weak students.**

**JB: It has been long times since the student have had physics. You need to review the basic topics in physics to drill the concepts home. Often, I do the lecture first and the problem sets afterwards.**

**BT: EE 213: Circuits; Grades were 2.5 average with a bi-modal distribution. Some students did not do any homework. Toward the end of the term, some students are handing in HW in mass.**

**RM: I see this all the time as well; I see this in EG31/EG32, as the instructor permits the handing in of HW late.**

**BT: These are day students with no work experience. This is unprofessional. Students do not put their names on the papers and they do not fasten the paper (staple).**

**RM: Students seem to feel HW is optional.**

**BT: There is nothing new, as they learned the basics in Physics.**

**JT: Students (some) are able to do the HW, but cannot do the test.**

**BT: Sometimes I think the answers are being copied.**

**RM: Book hw is now made for the students’ own studies, there is too much copying.**

**PG: I have students work the problems on the board.**

**JT: Students are not able to reproduce problem solving on the board and do not understand how to move from one step to the other.**

**JB: All the solution manuals are on-line now.**

**BT: I paid $10, and got a solution manual. The system uses social networking technology to solicit contributions from the students.**

**RM: EE213, Evening, No Electrical Engineers! All mechanical Engineers. One student was a little behind (may get a D in the class). We are using on-line quizzes. I have pre-recorded power points. The book was good. Average distribution, only 7 students in the class.**

**I taught EE310, Systems and Signals. The book was hard but good. There is a lot of math. There is very good detailed examples. We need to push the MATLAB earlier in the program. A few are really good at MATLAB. Lots just don’t use it. Some students don’t learn enough matlab to solve real problems. They need to make this a tool for all their courses. Math skills are a challenge for some students (part-time and transfer students). There were 3 students who signed up EE301 and did not have EE221.**

**JS: We don’t have control over the part-time students.**

**RM: Students just jump into the course and they feel pain. The students flunk (perhaps 3 of them) because they skipped the pre-reqs. So, 4 students have A and two or three have zeros. There were technology issues with GR22. Every week we were plugging in a projector.**

**EE315 (NanoElectronics I) we had 10 students. Some have had the intro to nano course. Our focus on this course is solid-state physics. We cover band-diagrams, quantum mechanics, etc. We cover the ODE, homework. The problems had no solutions. One student wanted permission of the instructor to take the course. He did not have the motivation to do the work and will flunk the course. The other students did well. There was a research problem/project and everyone did it.**

**DL: CR320 Computer Networks/CR246 Digital Design II.**

**One student (in both courses) will flunk both courses. He did not submit (or show) for the midterms. This was really a result of the student being lost in the class (and a lack of motivation). We have seen this with the student before. This term we used GHDL before hardware. We had system admin issues (Kostas erased the HD mid-term, without warning or backup). We need a better book for the networks course. The new book for DDII worked out well.**

**Basic problem: We never see the system admin and he appears to have communication issues.**

**JS: EE415/ME425 Numerical Methods; I load up the HW in that course. The problems are too long to work on in class. The HW is turned in weekly.**

**ECE435 MicroElectronics; Lectures on Thin and Thick film, IC design, and nanoelectronics (which was very popular). Also did a readings assignment.**

**CR390/ME390/EE390 – One problem I had was the team did not hook up with the mentor. Another problem was a team issues we have to work on.**

**ECE515L – Microelectronics Lab (thick film design). We got the ckt built and tested. We now have the means to make thick-film ckts. We can make minute version of ckts from scratch. Our PCB milling machine is now working well.**