



COUNCIL ON EDUCATIONAL POLICY

Meeting Minutes: January 8, 2019

3:30 PM, Loew 355

Members present: Mike Dodd, chair (CEE); Jennifer Tsai (ISE Advisor); Ruth Anderson (CSE); Andrew Davidson (HCDE); Shan Liu (ISE); Rene Overney (ChemE); Dwayne Arola (MSE); K Yang (AA); John Sahr (ECE)

Members absent: Sawyer Fuller (ME); Valerie Daggett (BioE); Brian Fabien (Associate Dean, Academic Affairs);

Guests: Mike Engh (AA), Virginia Vacchieri (COE), Shanai Lechtenberg (AA), Ken Bube (Associate Chair, MATH), John Palmieri (Chair, MATH)

Review of Minutes

- *December 4, 2018 – APPROVED*
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Course Proposals (see below)

- *Course proposals tabled until next meeting to allow for review and recommendation by the proposal subcommittee*
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Programs

- ***1503s for changes to CEE degree requirements - APPROVED***
 - Both requesting minor changes for ABET
 - CEE will need to take one more basic science credit, this will come from a list that already exists. Will flag those that will satisfy this new requirement.
 - Environmental engineering – will be adding an earth science requirement. Same process as CEE.

New Business

- ***MATH online courses – Ken Bube, Associate Chair, Mathematics and John Palmieri, Chair***
- **Background:**
 - The Math Department did a major overhaul of the calculus sequence (MATH 124, 125, and 126) about 20 years ago.
 - The online sections are intended, as much as possible, to simulate our in-person sections.
 - The Math Department started teaching online sections of MATH 124 and MATH 125 in Spring 2013, and added online sections of MATH 126 in Autumn 2013.
 - Lectures were easy but they found it was harder to do quiz sections. Piazza was identified as a way to replicate the quiz sections for students to ask questions.



COUNCIL ON EDUCATIONAL POLICY

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3:30 PM, Loew 355

- In the last quarter that Ken taught an online version, 200 students had 3000 interactions through Piazza. Feedback shows that students like this process.
- Students do online worksheets like they do in class and tape help videos. In class exams, office hours are the same.
- The biggest challenge is that students have the responsibility to keep up with the course – i.e. not having a set class time.
- One of the biggest benefits is that online courses give you flexibility if you need to accommodate new students and increase the enrollment easily
- Had 250 students in each 12X course in online classes in Autumn 2018. They would like to have fewer students in online sections and are adding more in class sections

- **Questions:**
 - Q- How do you decide on who is in an online vs in class?
 - A – It is first come, first served when they register.
 - Q- Why add more in-person sections?
 - A – There are certain benefits of in-person sections: Ratio of TA's, grading, having TA's know who their students are. Online TA's are less personal. For online sections, there is a certain enrollment (around 230) that seems to work best. 30 students is too few for good discussion, 500 is too many. Intro courses can have some challenges with the wide range of interest and abilities. With 30 students you could have a few students that answer everything. When a question is posted, it got answered by a student or a TA quickly. TA's and professors keep an eye on the questions/answers.
 - Q- Do more students prefer to do in-class sections?
 - A – That is the impression, as the in-class fill up quickly
 - Q- Is there a difference in the average grade between in-person and online sections?
 - A – some difference (lower online) in 124 and 125 but in 126 it is pretty much the same. They take the same final at the same time.
 - Q- Do they both use Piazza?
 - A – Yes, they can both use them. But the in-person don't use it as much because of the in-class quiz sections. Homework is the same for both. Weekly worksheets are given out a quiz sections and online they are posted and discussed in Piazza, also have short help videos available.
 - Q – Videos are made beforehand?
 - A – Yes, faculty do lecture and TA's do the worksheets video.
 - Q – How did you decide on the number of TA's to student ratio for in-class sections?
 - A – Reached out to other universities and consensus was 30 is the max.
 - Q – Is the limitation the instructors or space?
 - A – It is the dynamic in class – too many students means less interaction.
 - Q – Do faculty prefer in-person or online?
 - A – ideally they would all want 25 students in a class, but online works for some students due to flexibility
 - Q – If there are students in online sections that would prefer to be in in-class sections, how could we make this possible?

COUNCIL ON EDUCATIONAL POLICY

Meeting Minutes: January 8, 2019

3:30 PM, Loew 355

- A – It is a resource limitation – and we don't know exactly how many prefer one of the other. Some students already like the idea of online, some come around to it, but not sure how many did not like it.
- Q – The motivation to go online was to be ahead of the curve or due to resources/overflow?
 - A – UWT wanted to do an online class with main campus materials, so that prompted them to look at it. Initially not a lot students in the classes, but when enrollment went up it helped with accommodating more students.
- Q- What do we do with those students who do not want to be in an online class?
 - A – What is the difference between that and someone in a class with a professor they don't like? (CEP: The biggest difference that we hear from students is that they are missing the quiz section. The lectures are not cited as the issue, it is the time with the TA's to go over the materials every week). Goal for Mathematics is not to make people take online classes, but give people an alternative. If we had quiz sections would that help? They all need to have time blocked each week for when they would be doing the exams – would this help those that don't want to do online? There is this option right now, Math is open to more.
- Q – There is a stipulation on the time's schedule about residence credit, can this impact graduation?
 - A – This can be petitioned if it is an issue.
- Q – Are there any students who don't use Piazza?
 - A – We give them some points for participating to encourage them. A professor can see if a student is not looking at lectures or handouts on Canvas. You can also assign people to do things each week to help direct them.
- Q – If a student is not given a choice between online or in-person does that mean we are putting some students at a disadvantage, especially if it is luck of the draw? Why not say everyone has to do the online?
 - A – If they are persistent they can often get a spot.
- Q – Looking at DTC student difference in GPA between the two types of classes, what do we do to help those that are struggling (for example, first Gen students)?
 - A – We don't have enough data on this – for example the person teaching 125 was not also teaching an in-class so we don't know what her average is in that area. They do have to be more responsible to do the work. Part of the issue is that there were more students taking Calculus than last year; we can adjust if we know.
- Q – Would you be open to more TA's for online sections/recitation sections?
 - A – We would need to ask the faculty, but yes.
- Q - At Dawg Days can we have a section on how to be successful in online courses?
 - A - Yes, we think that First Year Programs should look into that.
- **CEP Discussion:**
 - A resolution that could be amenable for Math and Engineering is one large lecture and more TA sections, and giving all students access to the same tools.



COUNCIL ON EDUCATIONAL POLICY

Meeting Minutes: January 8, 2019

3:30 PM, Loew 355

- The concern was raised about the discrepancy with credit hours and contact hours for students in the online section that do not have a weekly scheduled recitation/quiz section.
- Math currently also has several classes that are the same but taught by different faculty – i.e. two 120 person classes instead of one 240 student class in the same quarter. Would they be willing to consolidate sections and increase class sizes?
- Plan to revisit discussion at the beginning of the next meeting.
- *Curriculum Proposal Subcommittee members for Winter 2019*
 - Ruth Anderson, Jennifer Tsai, JK Yang, Rene Overney

Adjourn

- Next Meetings – January 22, February 5 & 19, March 5

COUNCIL ON EDUCATIONAL POLICY

Meeting Minutes: January 8, 2019

3:30 PM, Loew 355

January 8, 2019 - College of Engineering Council on Educational Policy Meeting, Course Applications

Course	Type	Submit Date	Title	Notes	CEP Status
BIOEN 400	Modify	Nov 28 2018	Fundamentals of Bioengineering Design		To be reviewed at next subcommittee meeting
CHEM E 534	New	Dec 5 2018	Physiological Processes in Engineering Nanomedicine		To be reviewed at next subcommittee meeting
CHEM E 434	New	Dec 5 2018	Physiological Processes in Engineering Nanomedicine		To be reviewed at next subcommittee meeting
BIOEN 337	Modify	Dec 7 2018	Mass Transport and Systems Laboratory		To be reviewed at next subcommittee meeting
BIOEN 518	Modify	Dec 10 2018	Healthcare Transformation: Force, Directions, Implications		To be reviewed at next subcommittee meeting
AA 509	Modify	Dec 14 2018	Computational Fluid Dynamics		To be reviewed at next subcommittee meeting
BIOEN 489	New	Dec 26 2018	Advanced Tissue Engineering		To be reviewed at next subcommittee meeting
BIOEN 589	New	Dec 26 2018	Advanced Tissue Engineering		To be reviewed at next subcommittee meeting
BIOEN 470	New	Dec 26 2018	Systems Immunology and Immunoengineering		To be reviewed at next subcommittee meeting
BIOEN 570	New	Dec 26 2018	Systems Immunology and Immunoengineering		To be reviewed at next subcommittee meeting
BIOEN 217	New	Dec 26 2018	MATLAB Fundamentals for Bioengineers		To be reviewed at next subcommittee meeting

COUNCIL ON EDUCATIONAL POLICY

Meeting Minutes: January 8, 2019

3:30 PM, Loew 355

EE 477	Modify	Dec 27 2018	Automated Digital VLSI Design		To be reviewed at next subcommittee meeting
EE 525	Modify	Dec 27 2018	Automated Digital VLSI Design		To be reviewed at next subcommittee meeting
EE 478	New	Dec 27 2018	Capstone Integrated Digital Design Projects		To be reviewed at next subcommittee meeting
EE 526	New	Dec 27 2018	Capstone Integrated Digital Design Projects		To be reviewed at next subcommittee meeting
BIOEN 550	New	Dec 28 2018	Contemporary Light Microscopy and Biophotonics		To be reviewed at next subcommittee meeting
BIOEN 450	New	Dec 28 2018	Contemporary Light Microscopy and Biophotonics		To be reviewed at next subcommittee meeting
BIOEN 472	New	Dec 28 2018	Biosensors for Cancer		To be reviewed at next subcommittee meeting
BIOEN 572	New	Dec 28 2018	Biosensors for Cancer		To be reviewed at next subcommittee meeting
BIOEN 463	New	Dec 28 2018	Optogenetics		To be reviewed at next subcommittee meeting
BIOEN 563	New	Dec 28 2018	Optogenetics		To be reviewed at next subcommittee meeting
HCDE 524	New	Jan 2 2019	Programming Concepts in HCDE		To be reviewed at next subcommittee meeting