

**Monthly Faculty Meeting
Department of Electrical Engineering**

Present: Simin, Grigory – Organizer

Yinchao Chen
MVS Chandrashekhar,
Asif Khan
Krishna Mandal
David Matolak

Guoan Wang
Xiaofeng Wang
Bin Zhang
Moinul Islam
Jamie Steadman

Absent: Mohammad Ali, Seongtae Bae, Andrea Benigni, Herbert Ginn, Roger Dougal, Paul Huray, Enrico Santi

Recorder: Nat Paterson

The meeting was called to order by Dr. Grigory Simin, Undergraduate Director, on behalf of Dr. Roger Dougal, at 3:45 p.m. in EE Conference Room 3A75 on February 16, 2017.

1. Announcements –

- Minutes from last month were electronically approved
- Please follow up on your current 2017 Peer Evaluation of Teaching assignment(s)
- E-Week – next Saturday Feb 18, 2017 10 AM in Swearingen Building. Dr. Steadman is coordinating. Faculty participation welcome/encouraged.

2. Meeting Focus:

I. Fall 2016 Assessment Reports: Dr. Simin

Dr. Simin reported a progress on fall 2016 assessment report submission and the results of fall 2016 assessment data was discussed by courses. See appendix A for details.

An example of “good” report was presented to the faculty to give everyone guidelines on how to complete their reports for consistency. The example file is available on SharePoint for easy access, https://live.sharepoint.sc.edu/sites/cec/EE/EEDocs/AssessmentResults/_Template

Action Items –

- All faculty: continue working on the fall 2016 assessment report to incorporate comments from Dr. Simin and complete reports from the previous semesters.
- All faculty: continue working on Continuous Quality Improvement spreadsheet for each class and upload to SharePoint

II. Faculty Senate – Faculty Manual Proposed Change on Voting Membership

Dr. Chandra, EE Faculty Senator, informed the faculty that on March 1, 2017 Faculty Senate would vote on a few proposed changes to the Faculty Manual. One of those changes is to include non-tenure track faculty as voting members of the faculty. Dr. Chandra asked the faculty to provide feedbacks on how he should vote.

Vote: 7 faculty in favor of voting yes and 1 in favor of voting no

Action Items –

- Dr. Chandra and Dr. Santi will attend the next Faculty Senate meeting on March 1 and cast their vote.

Meeting adjourned at 4:40 pm

Learning Outcome Assessment results and CQI process reports

Feb 16, 2017

Department of Electrical Engineering



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Status of LO and CQI reports

<u>Required Courses</u>	<u>LO results Fall 2016 submitted?</u>	<u>CQI spreadsheet submitted?</u>
ELCT101		YES
ELCT102	YES	YES
ELCT201		YES
ELCT221	YES	
ELCT222	YES	
ELCT301	YES	YES
ELCT302		
ELCT321	YES	YES
ELCT331	YES	YES
ELCT350		YES
ELCT361		
ELCT363	YES	YES
ELCT371	YES	YES
ELCT403	YES	YES
ELCT404		

<u>Electives and 500 level courses</u>	<u>LO results Fall 2016 submitted?</u>	<u>CQI spreadsheet submitted?</u>
ELCT332 (elective)		
ELCT510		
ELCT521 (APOGEE)		
ELCT530		
ELCT531 (APOGEE)		
ELCT551 (APOGEE)	YES	YES
ELCT553 (APOGEE)		
ELCT561		
ELCT562 (APOGEE)	YES	YES
ELCT563 (APOGEE)		
ELCT564 (APOGEE)		
ELCT566		
ELCT572 (APOGEE)		YES
ELCT573		

Fall 2016 Course observations and recommendation

2016 Fall Course	Issues from LO or CQI	Recommendations
551 Power Systems Design and Analysis	Students did not like/enjoy the <u>transmission line capacitance, and inductance theories</u> . Only few students were able to make above 90, and few students had very poor performance (below 50)	
371 Electronics	<u>amplifier circuits with feedback loop</u> - Results in the range 56~100	
	Compute the bias points of electronic elements including diodes, bipolar transistors, and field effect transistors: 17 - 100	
363 - Semiconductors	more than 60 % of students showed difficulties in applied material science, statistics and basic quantum physics	

2016 Fall Course	Issues from LO or CQI	Recommendations
331 Control Systems	40% of the students had only a general understanding of <u>SFG (signal-flow graph) loops</u> and 40% of the students had a general understanding of how to solve block diagrams.	Spend more time on SFG loops. Focus more on SFG block diagrams and solving for the output of a block diagram; give more examples in classroom.
	Only 40% of class mastered <u>State Equations</u> .	Spend more Time on State Equations and mason's gain formula
	<u>Root Locus</u> : 27% of the student didn't seem to grasp the concept	Set aside more time to work on Root Locus
	Written reports on average were alright. They could have been better formatted.	Include a report format document with final project assignment in the future

2016 Fall Course	Issues from LO or CQI	Recommendations
321 Digital Signal Processing	difficultly grasping the concept of period and the harmonic coefficients that are necessary to construct Spectrum plots	Do more spectrum examples in class, and talk more about the harmonics relationships to spectrum
222 Signals and Systems	Derive signal's Fourier series is still an issue for 20% students, and some other 40% had a few mistakes on calculation	more homework question for Fourier transform and Fourier series practice
	half of students did not have enough practicing on Laplace transform	present some more examples of Laplace transform, leave more homework practices on Laplace transform
221 Circuits	Less the 70% of students demonstrated score of 70 or higher in using Thevenin transformation technique	spend more time on Thevenin and Norton transformation; give more examples in classroom

2016 Fall Course	Issues from LO or CQI	Recommendations
102 Electrical Science	majority of the Student got at least a General Understanding of RL and RC relationships	Spend more time on RL and RC circuits
	series and parallel connections of resistors, capacitors, and inductors; students that are new to circuit analysis tend to struggle with this	more emphasis on where to start combining resistors