# THE UNIVERSITY OF WISCONSIN-MILWAUKEE College of Engineering and Applied Science

#### FACULTY MEETING

Friday, November 21, 2014 1:45 p.m. EMS E190

#### **MINUTES**

The meeting was called to order at 1:52 p.m. with Dean Brett Peters presiding. Forty-six faculty members were present:

EXCUSED: Professors Armstrong, Hosseini, Jang, Liu, Munson, Nambisan, Otieno, Petering, Pillai,

Rahman, Renken, Rohatgi, Tabatabai, Venugopalan, L.Wang, Wornyoh

ABSENT: Professors Helwany, Kim, Seo

GUESTS: C. Schuster

#### I. ANNOUNCEMENTS

- A. Investigator Schuster from the UWM Police Department provided the faculty with active shooter response training.
- B. Profs. Avdeev, Campbell-Kyureghyan, and Titi were inducted into the Millionaire's Club.
- C. The interviews of the candidates for the two Senior Associate Dean positions have been completed. It is planned that there will be an announcement on the Research position soon, followed by the Academic Affairs position.
- D. Prof. Nasiri discussed the planning for the Professional Master's program. Faculty are asked to provide names of people to be surveyed and interviewed regarding the program, and there is a need for volunteers to interview industrial executives for their input on the program.
- E. Prof. Vitaliy Rayz, Assistant Professor in Mechanical Engineering was welcomed to the faculty.

#### II. INFORMAL REPORTS – See Attachment 1

#### III. AUTOMATIC CONSENT BUSINESS

- A. The Minutes of the September 26, 2014 meeting were approved as issued.
- B. New Courses and Course Changes See Attachment 2

#### C. Changes to the B.S. in Computer Science Curriculum – See Attachment 3

#### IV. UNFINISHED BUSINESS – None

#### V. NEW BUSINESS

#### A. Ph.D. Qualifying Examination Requirements – See Attachment 4

Prof. Boyland moved to change the Ph.D. Qualifying Examination requirements to state: "For students admitted after completion of an appropriate master's degree, this examination *must* be taken in the semester immediately after **12** credits of graduate course work have been earned at UWM."

Discussion ensued regarding both the merit of the proposal as well as a need for the GPSC to receive input from all departments on the matter.

Prof. Dhingra moved to refer this item back to the GPSC for further consideration.

The motion was seconded and passed (through a show of hands) 17-15. Therefore, the proposal has been returned to the GPSC for further consideration.

#### B. ABET Update

The ABET site visit was largely successful. At the time of the exit statement, Materials Engineering and Industrial Engineering received no shortcomings and the Electrical Engineering and Computer Engineering programs only have Concerns to address. The other programs did receive initial assessments of Weaknesses, which will be addressed in the upcoming months.

The faculty were reminded that the ABET accreditation process includes "Continuous Improvement", which means that the assessment and improvement process remains ongoing and is not to be put aside for the next several years.

#### C. Southwest Quadrant Planning Update

Dean Peters provided an update on the current status of the planning for the Southwest Quadrant. The most pressing needs identified are Chemistry-Teaching, Chemistry-Research, Health Sciences, and Psychology. If current state planning and budgeting methods are followed in the future (and no external donors are found for projects), the Southwest Quadrant redevelopment would be completed around the year 2050. However, there may be short-term renovations in EMS that are possible in the next several years, including a new auxiliary air handling unit (to increase fume hood capacity) and electrical upgrades.

#### VI. GENERAL GOOD AND WELFARE – None

# VII. ADJOURNMENT

Meeting Adjourned at 3:23 p.m.

John R. Reisel, Secretary CEAS Faculty

JRR Attachments

#### INFORMAL REPORTS

#### Office of Student Services - Todd Johnson

On the next page is a summary report on new CEAS freshmen and transfer students and where they came from

#### New CEAS Undergraduate Student Highlights

- 334 New Undergraduate degree candidates
  - o 208 Freshmen
  - o 126 Transfer
- 87% Freshmen from Wisconsin
- 65% Freshmen from Greater Milwaukee Area
- 64% of Transfer from Previous College in Wisconsin
- Top Feeder High School Brookfield Central
- Top Feeder College North China Institute of Electrical Power

# ENGINEERING & COMPUTER SCIENCE NEW UNDERGRADUATE STUDENTS FALL 2014

New Freshmen Top Feeder High Schools	
School	#
Brookfield East High School	6
New Berlin Eisenhower High School	5
Greenfield High School	5
Marquette University High School	5
Sheboygan North High School	5
West Bend East High School	5
Sussex Hamilton, Lakeview, Wauwatosa West	4

New Freshmen			
By State of High School			
State	#	%	
Wisconsin	180	87%	
Illinois	15	7%	
Minnesota	8	4%	
Other	1	0%	
International	4	2%	
Total	208	100%	

New Freshmen		
By Proximity to UWM		
Proximity to UWM	#	%
Suburb Milwaukee	117	56%
Other Wisconsin	45	22%
City of Milwaukee	18	9%
Illinois	15	7%
Minnesota	8	4%
International	4	2%
Other	1	0%
Total	208	100%

New Transfer	
Top Feeder Colleges	
School	#
North China Inst. of Electrical Power	17
Milwaukee Area Technical College	9
University of Wisconsin - Madison	7
Carroll College	6
Milwaukee School of Engineering	6
UW Green Bay, UW Oshkosh,	5
UW Washington Co, UW Waukesha	

New Transfer			
By State of Previous College			
State	#	%	
Wisconsin	81	64%	
Illinois	6	5%	
Minnesota	2	2%	
Other	15	12%	
International	22	17%	
	126	100%	

New Transfer		
By Type of Previous College		
Type of College	#	%
UW System 4-year	32	25%
International	22	17%
UW System 2-year	17	13%
Wisc. Technical College	16	13%
Wisconsin Private	16	13%
Other State 4-year	15	12%
Other State 2-year	8	6%
	126	100%

Career Services - Juli Pickering

No Report

<u>Curriculum Committee</u> – Prof. Tabatabai

No Report

Graduate Program Subcommittee - Prof. Li

No Report

Academic Planning Committee - Prof. Misra

The APC had two meetings in October. The main item at both of these meetings was to learn about the CEAS budget status. The logistics of conducting the CEAS climate survey were also discussed . The Committee talked about the voting rights of faculty members affiliated with multiple departments.

**Biomedical and Health Informatics** – Prof. McRoy

No Report

Faculty Senate - Prof. Reisel

At its October meeting, the Faculty Senate received updates on UWM's government lobbying efforts and on its Charter School program. At the November Faculty Senate meeting, the request for endorsement of the UWM Strategic Plan was withdrawn, and will be considered at a future Senate meeting.

Graduate Faculty Committee - Prof. Campbell-Kyureghyan

See below.

#### UPDATES FROM THE GRADUATE FACULTY COMMITEE

The UWM Graduate Faculty Committee (GFC) met on September 22, 2014. A brief summary of the items of most interest to CEAS from the meeting is presented below. Full details can be found at: http://graduateschool.uwm.edu/faculty-staff/governance/graduate-faculty-committee

- Dean of the Graduate School, Marija Gajdardziska-Josifovska, announced that the enrollment in the Graduate School this semester is similar to last year's. An important question is how to reach our target of 6,000 Graduate School students by 2020. There's the possibility that programs could purchase names of those who took the GRE Test to include in marketing campaigns with the goal of increasing the applicant pool. New program development is another avenue, but a process for prioritizing planning is needed.
- More than 80 potential graduate degree and certificate programs were proposed during the academic planning phase of the strategic plan.
- The information on the proposed changes to the Graduate School admissions and continuation policy was distributed and approved.

### Proposed Changes - Elimination of the probationary admission category

- ✓ Still need to provide evidence for admission if GPA is below 2.75
- ✓ All students held to the same continuation standards once admitted
- ✓ Eliminate the details of how English proficiency is attained from the admission policy (there is a separate GFC document for English proficiency)
- ✓ Eliminate the two-course restriction on deficiencies
- $\checkmark$  Discontinue tracking and removal of deficiencies by the Graduate School

# Other Proposed Changes – Continuation Policy

- ✓ If the probationary admission category is discontinued, then the Grad Dean's OK
  is not needed for failure to remove a student from probation status within three
  enrolled semesters
- ✓ If deficiency tracking is discontinued, then the Grad Dean's OK is not needed if deficiencies are not removed within three enrolled semesters

# <u>Other Proposed Changes – Continuation Policy – Academic Dismissal</u>

- ✓ Add accumulating U grades in thesis courses as a reason for dismissal (to be consistent with dissertation courses)
- ✓ Add the failing dissertation defense as a reason for dismissal

The two proposed changes above are not mandatory reasons for dismissal, but departments could use them.

• The Certificate Policy Change and the English Proficiency documents are still work in progress.

#### **NEW COURSES**

#### COMPSCI 240 INTRODUCTION TO ENGINEERING PROGRAMMING, 3 cr., U

Problem solving with structured programming techniques using an engineering oriented programming language, such as MATLAB, including control structures,

functions, arrays and matrices.

Prereq: Math Placement Code of 40 or Math 116(P).

#### **COURSE CHANGES**

#### COMPSCI 250 INTRODUCTORY COMPUTER PROGRAMMING, 3 cr., U

Problem solving with structured programming techniques using an object-oriented programming language, including control structures, functions, arrays, vectors, and pre-defined objects.

Prereq: Math Placement Code of 40 or Math 116(P) or Math 211(P)

had been

#### COMPSCI 201 INTRODUCTORY COMPUTER PROGRAMMING, 3 cr., U

Problem solving with structured programming techniques using an object-oriented programming language, including control structures, functions, arrays, vectors, and pre-defined objects.

Prereq: Math Placement Code of 35 or Math 116(C) or Math 211(C)

#### COMPSCI 251 INTERMEDIATE COMPUTER PROGRAMMING, 3 cr., U

Problem solving with objects. Writing classes. Use of standard data structures. Basic software development skills including text analysis tools, debugging, and configuration management.

Prereq: Math Placement Code of 40 or Math 116(P) or Math 211(P); C or better in CompSci 250(201)(P)

had been

#### COMPSCI 251 INTERMEDIATE COMPUTER PROGRAMMING, 3 cr., U

Problem solving with objects. Writing classes. Use of standard data structures. Basic software development skills including text analysis tools, debugging, and configuration management.

Prereq: Math Placement Code of 40 or Math 116(P) or Math 211(P); C or better in CompSci 201(P)

# COMPSCI 315 INTRODUCTION TO COMPUTER ORGANIZATION AND ASSEMBLY

LANGUAGE PROGRAMMING 3 cr., U

Introduction to number systems, arithmetic and Boolean operations. Digital computer organization. A specific computer system, assembly and machine language programming.

Prereq: Math Placement Code of 40 or Math 116(P) or Math 211(P); CompSci

250(201)(P).

#### had been

#### COMPSCI 315

# INTRODUCTION TO COMPUTER ORGANIZATION AND ASSEMBLY

LANGUAGE PROGRAMMING 3 cr., U
Introduction to number systems, arithmetic and Boolean operations. Digital computer

organization. A specific computer system, assembly and machine language

programming.

Prereq: Math Placement Code of 40 or Math 116(P) or Math 211(P); CompSci 201(P).

#### COMPSCI 317(217)

#### DISCRETE INFORMATION STRUCTURES, 3 cr., U

Introductory discussion of logic, proof techniques, sets, functions, relations,

combinatorics, probability, and graphs.

Prereq: grade of C or better in Math 221(P), 226(P) or 231(P); CompSci 250 (201)(P).

#### had been

#### COMPSCI 317(217)

#### DISCRETE INFORMATION STRUCTURES, 3 cr., U

Introductory discussion of logic, proof techniques, sets, functions, relations,

combinatorics, probability, and graphs.

Prereq: grade of C or better in Math 221(P), 226(P) or 231(P); CompSci 152(P) or

201(P).

## **ATTACHMENT 3**

# Changes to the B.S. in Computer Science Curriculum

All references to "CompSci 201" in the currently-approved B.S. in Computer Science curriculum will be changed to "CompSci 250".

# Ph.D. Qualifying Exam Requirements

From the GPSC:

Motion: Change the current requirements from:

"For students admitted after completion of an appropriate master's degree, this examination *must* be taken in the semester immediately after **18** credits of graduate course work have been earned at UWM."

to:

"For students admitted after completion of an appropriate master's degree, this examination *must* be taken in the semester immediately after **12** credits of graduate course work have been earned at UWM."