

**PURDUE UNIVERSITY  
GRADUATE SCHOOL**

Minutes of the Graduate Council Meeting  
October 15, 2015  
1:30 p.m.

Second Meeting  
Room 214CD  
STEW

PRESENT: Mark J. T. Smith, chair; Council Members, Lesa K. Beals (Registrar Representative), Richard E. Blanton, Natalie J. Carroll, David S. Cochran, Joy L. Colwell, Carlos M. Corvalan, Alejandro Cuza-Blanco, Lucy M. Flesch, C. Kenneth Holford, Jessica E. Huber, Mark A. Lipton, Linda J. Mason, Suresh K. Mittal, James L. Mullins, William Novshek, Kathryn M. Obenchain, Phillip E. Pope, Keith E. Schwingendorf, David G. Skalnik, , Joseph Thomas III, Jane A. Walker, Jeffrey L. Whitten, Jun Xie, Yan Ping Xin, Andrew K. Zeller

APOLOGIES FOR ABSENCE RECEIVED FROM: Thomas W. Atkinson, Bedrich Benes, Barrett S. Caldwell, Anne L. Fliotsos, Jonathan M. Harbor, Michael A. Jenkins, James L. Mohler, Carol S. Sternberger, Jon A. Story, Candiss B. Vibbert (Provost's Representative), Wenbin Yu, Howard N. Zelaznik

ABSENCES: Eric P. Kvam, John H. Schild, Chong Xiang

GUESTS: Stewart Chang Alexander, Debbie Fellure, Karen Foli, Colleen Gabauer, Laura Holladay, Jane Kirkpatrick, Cyndi Lynch, Gina Rupp

I. MINUTES

The minutes of the September 17, 2015, Graduate Council meeting were approved as presented.

II. DEANS REMARKS AND REPORTS

- a) Dr. Mark Smith gave an update on the CGS Global Summit held each September. The topic this year was Big Data. Dr. Smith noted there is potential to use data analysis at the graduate level to try to predicate yields. We make predictions about how many students will accept. In theory, we could have tools that would analyze data to help make our predictions. It was noted that there would be interest in Big Data.
- b) Dr. Phil Pope gave a report on recent degree proposal approvals.
- c) Dr. Pope gave a report on pending proposals in various stages of review and approval.

### III. PRESENTATION

Meng Deng, Assessment Data Analyst for the Graduate School, presented an overview of Dashboard using the Tableau server on different types of data.

Ms. Deng noted that the link had been sent to the college deans and department heads. This information will be shared with the faculty in their perspective departments.

- Data content will be displayed
- Pages will show statistics from respondents.
- Actual questions will be displayed

Ms. Deng reported that the information was collected at the time before students Thesis were deposited. This information is self-reported by students which means there may be different perceptions for the students.

Ms. Deng reported the Dashboard completion and retention rates:

- Data for time-to-degree – the information counts only students registered semesters
- Completion and retention – tracked Ph.D. students for ten years and master's students for six years maximum.

Ms. Deng reported the official enrollment and admits Dashboard allows more flexibility in viewing the data.

- Filter allows to filter by academic college and academic majors as well as IGP (Interdisciplinary Graduate Programs) information
- Enrollment filter allows breakdown of details:
  - What are the top countries or states students are coming from
  - Gender
  - Ethnicity
  - Breakdown of quantitative and qualitative GRE scores
  - Average GRE & TOEFL scores

Ms. Deng reported data was shared that was retrieved from HR (Human Resources) Data Mart showing graduate students TA (Teaching Assistantship) or RA (Resident Assistantship) counts and stipends and faculty and staff counts with breakdowns by departments.

Data requested from Sponsored Programs indicates the amount of proposed funding gathered by fiscal year and awards amount with average amounts. The goal is to update and maintain the data on a regular basis in order that all departments will be able to access the data.

### IV. AREA COMMITTEE REPORTS (Area Committee Chairs)

*Graduate Council Document 15G*, Graduate Council Documents Recommended for Approval:

Area Committee D, Humanities and Social Sciences (Richard E. Blanton, chair; blantonr@purdue.edu):

*Graduate Council Document 15-22a*, ANTH 64000, Foundations and Frameworks:  
Applying Anthropology (PWL)

*Graduate Council Document 15-22b*, ANTH 64100, Discovery and Design: Making Projects

Work (PWL)

*Graduate Council Document 15-22c*, ANTH 64200, Public Engagement: Using Anthropological Knowledge (PWL)

*Graduate Council Document 15-11a*, HIST 57300 The Long Nineteenth Century (PNC)

Dr. Richard Blanton presented four courses for consideration. The courses were approved by the council, upon a motion by Dr. Blanton.

Area Committee E, Life Sciences (Jane Walker, chair; walkerj@purduecal.edu):

*Graduate Council Document 15-12a*, BCHM 60300 Introduction to Graduate Research in Biochemistry I (PWL)

*Graduate Council Document 15-12b*, BCHM 60400 Introduction to Graduate Research in Biochemistry II (PWL)

*Graduate Council Document 15-12c*, BCHM 61501 Pathways (PWL)

*Graduate Council Document 15-9b* BIOL 56010 Clinical and Molecular Aspects of Neurodegenerative Diseases (IUPUI)

*Graduate Council Document 15-5b*, FNR 65000 Individual –Based Ecology and Modelling (PWL)

*Graduate Council Document 15-1h*, NUR 69010, Research Seminar (PWL)

*Graduate Council Document 15-1i*, NUR 69020, Leadership Seminar (PWL)

*Graduate Council Document 15-1j*, NUR 69030, Communication Seminar (PWL)

*Graduate Council Document 15-1k*, NUR 69040, Collaboration Seminar (PWL)

*Graduate Council Document 15-1L*, NUR 69050, Implementing Theory Healthcare Research (PWL)

*Graduate Council Document 15-1m*, NUR 69060, Innovative Care/Innovations in Healthcare Delivery (PWL)

Dr. Jane Walker presented eleven courses for consideration. The courses were approved by the council, upon a motion by Dr. Walker. BCHM 60300 and BCHM 60400 were approved by the Graduate Council with a stipulation to update the course description that BCHM 60400 is a continuation course.

Area Committee F, Management Sciences (Jun Xie, Chair; junxie@purdue.edu

*Graduate Council Document 15-13a*, OLS 50100 Leadership and Ethics, (IUPUI)

*Graduate Council Document 15-13d*, OLS 56200 Greening Organizations (IUPUI)

*Graduate Council Document 15-13e*, OLS 56300 Sustainable Practices in Business and Industry in the European Union (IUPUI)

*Graduate Council Document 15-13f*, OLS 57100 Advanced Project Management (IUPUI)

Dr. Jun Xie presented four courses for consideration. The courses were approved by the council, upon a motion by Dr. Xie.

#### DEGREE PROGRAMS & GRADUATE CERTIFICATES:

Area Committee A, Behavioral Sciences (Jeffery L. Whitten, jwhitten@purdue.edu ):

*Graduate Council Document 15-21a*, Proposal for a Graduate Certificate in Addictions Counseling, submitted by Department of Graduate Studies in Education, Purdue University, Calumet.

Dr. Jeffery Whitten presented a Graduate Certificate in Addictions Counseling, Submitted by the Department of Graduate Studies in Education, PUC. He stated that the area committee had reviewed the document and it appeared to be sound and ready for council consideration. The proposal was approved by the council, upon a motion by Dr. Whitten.

Area Committee E, Life Sciences (Jane Walker, chair; walkerj@purduecal.edu):  
*Graduate Council Document 14-26a*, Proposal for a Ph.D. in Nursing, from the School of Nursing (PWL)

Dr. Jane Walker presented a proposal for a Ph.D. in Nursing, Submitted by the School of Nursing, PWL. She stated that the area committee had reviewed the document and it appeared to be sound and ready for council consideration. The proposal was approved by the council, upon a motion by Dr. Walker.

## V. PURDUE GRADUATE STUDENT GOVERNMENT – PRESIDENT’S REPORT

Mr. Andrew Zeller, President of the Purdue Graduate Student Government (PGSG) provided information regarding:

- Survey results PGSG host program, expansion
- Fall picnic success
- Update re: Liberal Arts Teaching Assistant’s pay, inclusion in Ever True
- Three task forces started: diversity, sexual assault, academic honesty

## VI. NEW BUSINESS

1. Lesa Beals, Senior Associate Registrar, presented the *Resolution to Update how the Graduate GPA is Calculated for the Official Purdue University Transcript*. Associate Registrar Beals worked on the proposal with Tom Atkinson, Associate Dean of the Graduate School. Ms. Beals noted that financial aid for graduate students may be jeopardized by courses that are taken and are excluded from being counted.

Ms. Beals noted that credits in excess of six 30000- and 40000-level courses have been excluded from calculation in graduate students’ GPAs and completed hours. All 10000- and 20000-credits have historically been excluded from calculation into graduate students’ GPAs and completed hours. Ms. Beals also noted that grades earned in certain language courses (French, German, Russian and Spanish) are also excluded from calculation into graduate students’ GPAs and completed hours.

The resolution being presented is to resolve that undergraduate courses (with the exception of courses intended to be repeated for credit) taken by graduate students, shall no longer be excluded from counting as credit on their academic records.

The resolution also is to resolve that 60000-level language courses, frequently used by some departments for graduate students to establish a reading knowledge of one or more

languages other than English shall no longer be excluded from calculation into graduate students' GPAs. Be it further resolved that other current policies regarding the use of undergraduate course credits and certain 60000-level courses in languages (taken for the purpose of demonstrating proficiency in a language other than English) on graduate plans of study are affirmed and that the graduate Plan of Study shall continue to constitute the official record of coursework required for a graduate degree.

2. Dr. David Cochran presented the Purdue University Fort Wayne Fall 2015 Enrollment Report. The complete report is posted on the Graduate School website.  
(<http://www.purdue.edu/gradschool/faculty/enrollment.html>)
3. Dr. Joy Colwell presented the Purdue University Calumet Fall 2015 Enrollment Report. The complete report is posted on the Graduate School website.  
(<http://www.purdue.edu/gradschool/faculty/enrollment.html>)
4. Dr. Joy Colwell presented the Purdue University North Central Fall 2015 Enrollment Report. The complete report is posted on the Graduate School website.  
(<http://www.purdue.edu/gradschool/faculty/enrollment.html>)

## VII. OLD BUSINESS

Don Brier, Director of Information Management and Analysis, gave an update on the IUPUI E-Documentation project.

Mr. Brier reported that IUPUI requested students in Purdue programs be able to access The Graduate School electronic forms (Electronic Plans of Study, Changes to Plans of Study, Exam forms and other electronic forms). The three basic processes for this request are:

1. Students career account credentials are being created (829)
2. Staff need to be added in the system to administer the different electronic forms
3. Manual operations are needed to set up faculty to access the system

The plan is to have these processes in place in early November.

Mr. Brier noted that the electronic faculty appointments, the electronic plans of study, and the electronic changes to plans of study are the first three processes that will be available to the IUPUI campus. The next phase will be the exam forms, with the final phase being the thesis forms.

## VIII. CLOSING REMARKS AND ADJOURNMENT

The council meeting was adjourned by Dr. Smith at 2:55 p.m.

Mark J. T. Smith, Chair

Tina L. Payne, Secretary

## PENDING DOCUMENTS

(October 15, 2015)

### **BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE**

Area Committee A, Behavioral Sciences (Jeffery L. Whitten, [jwhitten@purdue.edu](mailto:jwhitten@purdue.edu)):

***Graduate Council Document 15-23a, CIT 51600, Database Security (IUPUI)***

***Graduate Council Document 15-23e, CIT 53200, Wireless Security and Technology (IUPUI)***

***Graduate Council Document 15-23h, CIT 55510, Network Security (IUPUI)***

***Graduate Council Document 15-23i, CIT 56200, Mobile and Network Forensics (IUPUI)***

*Graduate Council Document 13-9c, ECET 55800 Mechatronics System Design, Modeling & Integration, (PUC) Pending; additional information*

***Graduate Council Document 13-16d, ITS 57000 Principles of Computer Networks and Communications (PUC); This course is being resubmitted with a new supporting document and course learning outcomes by request of Area Committee Chair on 4/18/2014.***

*Graduate Council Document 13-16c, ITS 55100 Principles of Information Assurance, (PUC) Pending; additional information*

***Graduate Council Document 14-21a, MET 55000, Mechanical System Design and Integration for Mechatronics (PUC) Pending; additional documents***

***Graduate Council Document 15-20a, Proposal for a Ph.D. in Addiction Neuroscience from the Department of Psychology, IUPUI***

Area Committee C, Engineering, Chemistry, and Physical Sciences (Barrett Caldwell, chair; [bscaldwell@purdue.edu](mailto:bscaldwell@purdue.edu)):

***Graduate Council Document 14-29a, EAPS 51800, Soil Biogeochemistry (PWL)***

***Graduate Council Document 14-29b, EAPS 52700, Principles of Terrestrial Ecosystem Ecology (PWL)***

***Graduate Council Document 14-17a, FIS 50800 Forensic Science Laboratory Management (IUPUI)***

***Graduate Council Document 15-17a, Proposal for a Ph.D. in Mathematical Sciences from the Department of Mathematical Sciences, IUPUI***

***Graduate Council Document 15-18a, Proposal for a Ph.D. in Physics from the Department of Physics, IUPUI***

***Graduate Council Document 15-19a, Proposal for a Ph.D. in Computer Science from the Department of Computer and Information Science, IUPUI***

Area Committee E, Life Sciences (Jane Walker, chair; [walkerj@purduecal.edu](mailto:walkerj@purduecal.edu)):

***Graduate Council Document 14-15j, BIOL 58610, Sensory Ecology (PWL)***

***Graduate Council Document 15-9c BIOL 54410 Invasion Biology (PFW)***

***Graduate Council Document 13-23a, HSCI 57100 Molecular Imaging (PWL)***

Area Committee F, Management Sciences (Jun Xie, chair; [junxie@purdue.edu](mailto:junxie@purdue.edu)):

***Graduate Council Document 15-13b, OLS 53010 Mixed Methods Research (IUPUI)***

***Graduate Council Document 15-13c, OLS 56100 Critical Thinking and Problem Solving (IUPUI)***

**NEW DOCUMENTS RECEIVED**  
(After the October 15, 2015 Graduate Council Meeting)

Area Committee C, Engineering, Chemistry, and Physical Sciences (Barrett Caldwell, chair; [bscaldwell@purdue.edu](mailto:bscaldwell@purdue.edu)):

*Graduate Council Document 15-24a, ECE 50863, Computer Network Systems (PWL)*  
Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3.

The goal of this course is to provide students with a proper grounding in the basic concepts and seminal work in computer network protocols and systems, and to introduce students to research in the field. The course will cover classical concepts such as network architecture, switching, routing, congestion control, and quality-of-service, and discuss recent developments in these areas. The course will also cover new developments in networking such as network measurements, network management, overlay networking and peer-to-peer systems, network security, and new network architectures. The course will emphasize a system-oriented and empirical view of internet architecture. Graduate standing or consent of instructor. Professor Rao.

*Graduate Council Document 15-25a, ME 52950, Theory of Plates and Shells (PUC)*  
Sem. 1 and 2. SS. Lecture 2 times per week for 80 minutes. Credit 3. Prerequisites: CE 27300 and MA 26400 and MA 26500 all with a "C" grade or higher.

Derivation of elastic and plastic stress-strain relations for plate and shell elements; bending and buckling of rectangular plates, nonlinear geometric effects; post-buckling and ultimate strength of cold formed sections; general theory of elastic shells and axisymmetric shells; buckling, crushing and bending strength of cylindrical shells with application to offshore structures; and the application to crashworthiness of vehicles; explosive and impact loading of structures. Professor Pai.

Area Committee E, Life Sciences (Jane Walker, chair; [walkerj@purduecal.edu](mailto:walkerj@purduecal.edu)):

*Graduate Council Document 15-9d, BIOL 55110, Proteins: Structure and Function (PFW)*  
Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: BIOL 21800 or consent of instructor.

A study of the principles governing protein structure and function. Topics covered include the mechanisms of enzyme action, multienzyme complexes, protein flexibility and dynamics, molecular movement and signal transduction by proteins inside cells. Bioinformatics and molecular biological techniques used for studying proteins will also be taught. Professor Daniel.

*Graduate Council Document 15-9e, BIOL 57710, Emerging Infectious Diseases (PFW)*  
Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: BIOL 21800 or consent of instructor.

This course will introduce the molecular biology and epidemiology of several emerging infectious diseases affecting humans caused by viruses, bacteria, fungi and protozoa using recent peer-reviewed scientific reviews as course material. Students completing this course will obtain a deeper understanding of the microbial agents that are currently causing several important diseases worldwide. The topics covered will focus on how the pathogens enter and spread within the human body and between persons, the host response to infection, clinical symptoms, diagnosis, treatment prevention. Professor Daniel.

*Graduate Council Document 15-27a*, **MGMT 68200, Digital Business and Information Strategies** (PWL) Sem. 2. Lecture 2 times per week for 90 minutes for 7 weeks. Credit 2.

The Internet and other emerging technologies have enabled new ways for companies to organize their businesses. Companies are also increasingly dealing with digital information that is different in many ways from other goods and services. The purpose of this course is to explore how new digital business models and digital information affect company strategy, market structure, and pricing.

We will use lectures, cases, class discussions, games, and team projects to examine a variety of topics including pricing and competition on the Internet, cross-channel competition and marketing, "Long Tail", pricing of digital information, bundling, versioning, network effects, platform, and a variety of other topics. Fundamental economic principles will be illustrated using business case studies. At times, we will also discuss emerging digital technologies, business models and industry structures. Professor

*Graduate Council Document 15-27b*, **MGMT 68700, Design for Instincts: Social Networks and Engagements** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 90 minutes for 7 weeks. Presentation. Variable Credit 1- 3.

This course will build on design thinking and game design techniques to develop process, policies, and/or products that appeal to human instincts. We will cover ideas that provide insights into, for example, new product development, entrepreneurship or designing HR policies. To name a few examples of projects we will discuss, SAP's points-based system to encourage carpooling that helps the company save on large gas expenses; at challenge.gov, the Whitehouse encourages innovative solutions through crowdsourcing; and at companies like Google, and Best-Buy, employees participate in information assimilation games called prediction markets providing information to senior managers about ongoing projects.

In this course, you will examine the mechanisms behind designing for human instincts and thereby developing an understanding of their effective use in the modern firm. Gamification is one form of design for human instincts. In order for any design to be effective, it should involve clearly defined strategies and well-managed execution. To identify effective strategies, and metrics for the application of techniques to business, this course will draw upon interdisciplinary source material as well as real-world case studies. It will also identify a number of significant pitfalls to techniques, as well as notable legal and ethical issues, and the problems with implementing radical change in established firms. As a part of this class, you will be designing, playing, and evaluating various games. Professor Kannan.