# PURDUE UNIVERSITY GRADUATE SCHOOL

Minutes of the Graduate Council Meeting February 19, 2015 1:30 p.m.

Fifth Meeting Room 214CD Stewart Center

PRESENT: Mark J. T. Smith, chair; Council Members, Thomas W. Atkinson, Subramanian Balachander, Barrett S. Caldwell, David S. Cochran, Joy L. Colwell, Lucy M. Flesch, Frederick S. Gimble, Inez Hua, Michael A. Jenkins, Christopher F. Kulesza, Eric P. Kvam, Linda J. Mason, Kathryn M. Obenchain, Glenn R. Parker, Phillip E. Pope, Mary A. Sadowski (represented by Michael Eddy), John H. Schild, David G. Skalnik, Carol S. Sternberger, Jon A. Story, Joseph Thomas III, Candiss B. Vibbert (Provost's Representative), Jane A. Walker, Jeffrey L. Whitten, Howard N. Zelaznik

APOLOGIES FOR ABSENCE RECEIVED FROM: Bedrich Benes, Frank J. Blalark, Jessica E. Huber, James L. Mullins, Cynthia S. Roberts, Keith E. Schwingendorf, J. Jill Suitor, Wenbin Yu

ABSENCES: John M. Barron, Mark A. Lipton, Suresh K. Mittal, Bill V. Mullen, Holly Wang, Yan Ping Xin

GUESTS: Janet Beagle, Shawn Donkin, Nancy Edwards, Debbie Fellure, Audeen Fentiman, Rosanne Griggs, Larry Nies, Nina Robinson, Karla Ross

#### I. <u>MINUTES</u>

The minutes of the January 22, 2015, Graduate Council meeting were amended to include a list of topics discussed by the PGSG president. The minutes were approved by the council.

#### II. DEANS REMARKS AND REPORTS

a) Dean Mark Smith reported that he is on the Graduate Record Exam (GRE) board and gave a brief update on the GRE meeting he attended recently. The GRE Board and Educational Testing Service (ETS) have done extensive research on the GRE.

Dr. Smith noted that one of the studies they are looking at is the type of questions being asked and the impact those questions have on various groups.

b) Dr. Pope gave a report on pending graduate program proposals in various stages of review/approval.

### III. PRESENTATION

Dr. Daniel Hirleman, Chief Corporate and Global Partnerships Officer gave a presentation on *Global Partnerships*. Dr. Hirleman discussed Purdue University's global vision. He noted that Purdue University will be the benchmark institution that serves as a model for how a large, public research university can be a global university in the absence of a physical campus presence in multiple countries. He stated that we will accomplish this via key strategic partnerships with public and private sector entities around the world.

Details about Purdue's strategic goals (corporate and global partnerships); structure and support; and strategic partnerships with; private sector (multi-nationals), NGO (Catholic Relief Services, RAND), Universities, Nations (Columbia, India), and Continent may be found on the Graduate Programs Office website, https://www.purdue.edu/gradschool/academics/gpo.cfm.

IV. <u>AREA COMMITTEE REPORTS</u> (Area Committee Chairs) Graduate Council Document 15B, Graduate Council Documents Recommended for Approval:

<u>Area Committee A, Behavioral Sciences (Jeffrey Whitten, chair; jwhitten@purdue.edu</u>): Graduate Council Document 13-6b, EDFA 53900 School Administration: The Effective School Executive (PUC)

*Graduate Council Document 13-4n,* **EDPS 52800 Research in Counseling** (PUC) *Graduate Council Document 13-4o,* **EDPS 54600 Addictions Practicum** (PUC)

Dr. Jeffrey Whitten presented three courses for consideration. The courses were approved by the council, upon a motion by Dr. Whitten.

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

*Graduate Council Document 14-13b*, **CE 51700 Advanced Water Treatment Processes** (PFW)

Graduate Council Document 14-14c, ME 58400 System Identification (PWL)

Dr. Barrett Caldwell presented two courses for consideration. The courses were approved as a block by the council, upon a motion by Dr. Caldwell.

<u>Area Committee E, Life Sciences (Frederick Gimble, chair;fgimble@purdu.edu):</u> Graduate Council Document 14-15b, **BIOL 51601 Food Microbiology** (PUC) Graduate Council Document 14-15c, **BIOL 51605 Environmental Microbiology** (PUC) Graduate Council Document 14-15f, **BIOL 54410, Sensory Systems** (IUPUI) Graduate Council Document 14-15h, **BIOL 57410, Molecular and Cellular Bone Biology** (IUPUI) Graduate Council Document 14-15i, BIOL 62500, Immune System Disorders (IUPUI) Graduate Council Document 14-12a, CPB 63000 Advanced Veterinary Avian Pathology (PWL) Graduate Council Document 14-12b, CPB 63100 Avian Immunology (PWL) Graduate Council Document 14-12c, CPB 63200 Avian Medicine (PWL) Graduate Council Document 14-12d, CPB 63300 Preventive Avian Medicine Practice (PWL)

Dr. Frederick Gimble presented nine courses for consideration. The courses were approved by the council, upon a motion by Dr. Gimble.

### DEGREE PROPOSAL:

<u>Area Committee C, Engineering, Chemistry, and Physical Sciences (Barrett Caldwell, chair; bscaldwell@purdue.edu):</u>

# *Graduate Council Document 14-24a*, **Proposal for an M.S. and Ph.D. in Environmental and Ecological Engineering, from the College of Engineering** (PWL)

Dr. Barrett Caldwell presented the proposal for consideration. The proposal was approved by the council, upon a motion by Dr. Caldwell.

# V. <u>PURDUE GRADUATE STUDENT GOVERNMENT -- PRESIDENT'S REPORT</u>

Mr. Christopher Kulesza, President of the Purdue Graduate Student Government (PGSG), provided information regarding activities of the PGSG since the last council meeting.

Mr. Kulesza discussed a resolution that will be submitted to the Purdue Graduate Student Senate, *"Resolution to Support Graduate Student Stipend Levels"*. A copy of this document was provided to all council members.

Mr. Kulesza discussed House Bill No. 1455. A copy of this document was provided to all council members.

#### VI. <u>NEW BUSINESS</u>

a) Dr. Smith noted that there have been discussions with small groups regarding graduate certificates and degrees and whether we are over credentialing our students. There will be follow-up discussions and a possible task force could be formed to look into this issue. New guidelines may need to be created.

#### VII. CLOSING REMARKS AND ADJOURNMENT

Dr. Smith noted that the next council meeting will be on March 26, 2015, at 1:30 p.m.in Stewart Center, room 218AB.

The council meeting was adjourned by Dr. Smith at 2:31 p.m.

Mark J. T. Smith, Chair

Tina L. Payne, Secretary

# APPENDIX A

# PENDING DOCUMENTS

# (March 26, 2015)

# BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

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

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

*Graduate Council Document 13-5a*, EDCI 53800 Human Issues in Instructional Technology (PUC)

*Graduate Council Document 13-6a*, EDFA 61700 Legal Aspects in American Education II (PUC)

*Graduate Council Document 13-4m,* EDPS 52600 Integrating Students with Special Needs: A Civil Rights Movement (PUC)

*Graduate Council Document 15-2a,* EDPS 55600, Introduction to Quantitative Data Analysis Methods in Education I (PWL)

*Graduate Council Document 15-2b*, **EDPS 55700**, **Introduction to Quantitative Data Analysis Methods in Education II** (PWL)

*Graduate Council Document 13-16b*, ITS 52000 Web Applications, (PUC); This course was resubmitted with a new supporting document, course description, and course learning outcomes by request of Area Committee Chair on 4/18/2014.

*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

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

*Graduate Council Document 14-13a*, CE 51600 Advanced Selected Topics in Civil Engineering (PFW)

*Graduate Council Document 14-13d*, CE 51900 Advanced Soil Mechanics (PFW) *Graduate Council Document 13-26a*, CHE 55100 Principles of Pharmaceutical Engineering (PWL) Pending; additional information. *Graduate Council Document 13-26b,* CHE 55300 Pharmaceutical Process, Development and Design (PWL) Pending; additional information.

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 14-29c*, EAPS 52900, Modeling Ecosystems and Biogeochemical Cycles (PWL)

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

*Graduate Council Document 14-25a*, Proposal for an M.S. and Ph.D. in Construction and Engineering Management, from the College of Engineering (PWL)

<u>Area Committee D, Humanities and Social Sciences (Glenn Parker, chair; parker6@purdue.edu</u>): Graduate Council Document 14-30a, ENGL 60400, Introduction to Inquiry in Second Language Studies (PWL)

Area Committee E: Life Sciences (Frederick S. Gimble, chair; edwardsn@purdue.edu):

Graduate Council Document 14-15k, BIOL 56310, Protein Bioinformatics (PWL)

Graduate Council Document 14-15l, BIOL 58210, Ecological Statistics (PWL)

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

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

*Graduate Council Document 15-1a*, NUR 51600 Clinical Applications in Pharmacology Family Nurse Practitioner (PWL)

*Graduate Council Document 15-1b,* NUR 61500 Primary Care of the Young Family Preceptorship (PWL)

*Graduate Council Document 15-1c*, NUR 62700 Primary Care of the Aging Family Preceptorship (PWL)

*Graduate Council Document 15-1d,* NUR 63100 FNP Preceptorship Clinical Synthesis (PWL) *Graduate Council Document 14-26a,* Proposal for a Ph.D. in Nursing, from the School of Nursing (PWL)

Graduate Council Document 14-28a, Proposal for a Professional M.S. in Biology (PNC)

Area Committee F, Management Sciences (John Barron, chair: barron@purdue.edu): Graduate Council Document 14-20b, MGMT 59100 Launching Global Leaders (PWL) Graduate Council Document 14-22a, OLS 54700, Conflict Management (PNC) Pending; additional documents from proposer.

*Graduate Council Document 14-22b*, OLS 58900, Leadership Ethics (PNC); Pending; additional documents from proposer.

*Graduate Council Document 14-22c*, OLS 59500, Research Methods for Leadership Studies (PNC); Pending; additional documents from proposer.

*Graduate Council Document 14-22d*, OLS 59700, Conflict Management (PNC); Pending; additional documents from proposer.

*Graduate Council Document 14-27a*, Proposal for an M.S. in Leadership, from the College of Business (PNC)

# NEW DOCUMENTS RECEIVED

(After the February 19, 2015 Graduate Council Meeting)

#### Area Committee A, Behavioral Sciences (Jeffrey Whitten, chair; jwhitten@purdue.edu):

# *Graduate Council Document 15-7a,* **YDAE 52000, Foundations of Agricultural Education, Extension, and Communication** (PWL) Sem. 1. Lecture 1 time per week for 150 minutes. Credit 3.

Critical analysis of the historical and philosophical assumptions, current strategic intents and relevant policies underpinning the discipline of agricultural education- inclusive of Extension education and agricultural communication- and project the impact existing economic, social and political issues may have in this field in the next 15 to 25 years. Typically offered Fall of odd numbered years. Professors Brady, Knoblach, and Tormoehlen.

*Graduate Council Document 15-7b,* **YDAE 68100, Research Design for Social Scientists** (PWL) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite or Co-Requisite: FNR 58000 or EDPS 53300 (or instructor's permission for graduate-level social science research methods course).

The goal of the course is to examine social science theories and research designs in the contexts of agricultural and natural resources education, communication and engagement. Students will develop an understanding of the chain of reasoning and create a research design to study a problem of interest. Students will apply the concepts they learned in a research methods course by critiquing research manuscripts and creating a rationale for a research proposal. After taking the course, students should have gained understanding of how research designs are thoughtfully and argumentatively justified to study a researchable problem in informal, nonformal, and formal educational contexts and other social science contexts. Professors Knobloch and Esters.

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

*Graduate Council Document 14-13c*, **CE 51800 Bridge Design** (PFW) Sem. 1. and 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: CE 47500 and CE 47800 or equivalent or permission from instructor.

Bridge types, superstructure and substructure elements, loads on bridges, bridge analysis, design limit states, design of the superstructure and substructure members, concrete and steel elements, and evaluation of the highway bridges. Includes the use of a computer software package for bridge analysis and design. Professor Alhassan.

*Graduate Council Document 15-3a*, **MSE 52700**, **Introduction to Biomaterials** (PWL) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: Junior standing in Engineering or Science.

This course aims to introduce students to Biomaterials concepts: structure, properties, and applications. The class will cover the main classes of materials: metals, ceramics and polymers in the context of their use in medicine as implant materials, drug delivery vehicles, and as tissue engineering scaffolds. Professor Stanciu.

Area Committee D, Humanities and Social Sciences (Glenn Parker, chair; parker6@purdue.edu):

Graduate Council Document 15-8a, Proposal for Adding a Thesis Option to Master's Degree Programs in Professional Communication, IPFW

Area Committee E, Life Sciences (Frederick Gimble, chair; fgimble@purdu.edu):

*Graduate Council Document 15-4a*, AGR 59500, Current Topics in Agriculture, Natural Resources, and Related Sciences (PWL) Sem. 1 and 2. SS. Lecture 3 times per week for 50 minutes. Variable Credit 1 to 3.

Critical examination of developments in specialized and emerging areas of agriculture not taught in other courses. Some topics include lecture, lab, directed reading or independent study. Open to graduate and upper division undergraduate students Permission of the instructor required. Instructor will vary.

#### *Graduate Council Document 15-5a,* **FNR 50600, Theory & Application of Natural Resources Extension Programming** (PWL) Sem. 2. Lecture 2 times per week for 100 minutes. Credit 1.

This course will provide an opportunity for students to develop and implement extension activities based on their research interests. The course will focus on important natural resources issues, identify common target audiences, provide examples of extension programming, discuss outputs developed from various extension programs, and outline metrics used to evaluate program impact. Professors Williams and MacGowen.

# *Graduate Council Document 15-1e,* **NUR 64000 Human Factors in Healthcare Engineering** (PWL) Sem. SS. Lecture 1 time per week for 192 minutes. Credit 3. Prerequisites: NUR 51000 or equivalent. Undergrad Statistics course within the past five years.

This course provides a foundation for healthcare professionals in the application of human factors, ergonomics, theories, and principles to improve the healthcare system. The interaction between humans and artifacts, environments, culture, and social structures as they apply to patient safety and healthcare system improvement issues are presented. Professor Yi.

# *Graduate Council Document 15-f,* **NUR 64200 Systems Approaches in Healthcare** (PWL) Sem. SS. Lecture 1 time per week for 192 minutes. Credit 3.

Students are introduced to the fundamentals of systems engineering tools and approaches through hands on problem solving exercises. Systems Engineering tools/methods are applied to a clinical problem. Upon completion of this course, the participants will have had exposure to system engineering tools and approaches such as process mapping, bottle-neck analysis, queuing, lean engineering, simulation, optimization, dealing with uncertainty, what-if analysis, quality control and performance monitoring techniques. Professor McComb

#### Area Committee F, Management Sciences (John Barron, chair; barron@purdue.edu):

*Graduate Council Document 15-6a*, **AGEC 57100**, **Global Issues in International Agribusiness** (PWL) Sem. 1. Lecture 1 time per week for 50 minutes. Credit 1. Prerequisites: Enrollment in Professional Masters in International Agribusiness or permission of instructor.

This is the first course in a required three-course sequence designed for students in the "Professional Masters in International Agribusiness" concentration in the Department of Agricultural Economics. The course objective is to expose students to a wide range of global issues directly and indirectly related to the production, processing, and marketing of agricultural products (food, fuel, fiber). Topics vary and may include food security, malnutrition, food safety, biofuels, the

environment, trade and agricultural policy, emerging agricultural technologies, and climate change. Professor Wang.

### *Graduate Council Document 15-6b*, AGEC **57200**, International Agribusiness Market Opportunities (PWL) Sem. 2. Lecture 2 times per week for 50 minutes. Credit 2. Prerequisites: AGEC 57100 and enrollment in Professional Masters in International Agribusiness or permission of instructor.

This is the second course in a required three-course sequence designed for students in the "Professional Masters in International Agribusiness" concentration in the Department of Agricultural Economics. The course objective is to assist students in identifying and exploring market opportunities in international agribusiness, including those related to the production, processing, and marketing of agricultural products including food, fuel, and fiber. The course combines lectures with discussion and project-based learning and group activities. Professors Wang and Langemeier.

*Graduate Council Document 15-6c,* **AGEC 57300, International Business Analysis** (PWL) Sem. 1. Lecture 3 times per week for 50 minutes. Credit 3. Prerequisites: AGEC 57200 and enrollment in Professional Masters in International Agribusiness or permission of instructor.

This is the third course in a required three-course sequence designed for students in the "Professional Masters in International Agribusiness" concentration in the Department of Agricultural Economics. The course objective is to assist students in conducting a professional business analysis focusing on either a market opportunity, financial management, or other management issue in international agribusiness. The course is project-based and includes group activities and written and oral presentations. Professor Wang.