

PURDUE UNIVERSITY GRADUATE SCHOOL

Minutes of the Graduate Council Meeting
November 19, 2020
1:30 p.m.

Third Meeting

Via Zoom - No face to face meeting due to COVID-19

PRESENT: Linda J. Mason, chair, Council Members, Dulcy M. Abraham, Christopher R. Agnew, Thomas W. Atkinson, Steven J. Burdick, David S. Cochran, Joy Colwell, G. Jonathan Day, Eric D. Deemer, Bryan DeWitt, Duane D. Dunlap, Emad Elwakil, Levon Esters, Margaret Gitau, Richard H. Grant, Chong Gu, Erla Heyns, Timothy B. Lescun, James L. Mohler, John A. Morgan, Melanie Morgan, Zhan Pang, Tina L. Payne, Paul Salama, Abraham Schwab, David G. Skalnik, John A. Springer, Jill Sutor, Candiss B. Vibbert (Provost's Representative), Eric Waltenburg, Jennifer William, Chenn Zhou

APOLOGIES FOR ABSENCE RECEIVED FROM: Christopher K. Belous, Keith B. Gehres, Nicole J. Widmar

ABSENCES: Raida Abuizam, Suzanne C. Bart, Janice S. Blum, Rita A. Burrell, Paul F. Muzikar, Madelina Nuñez, Ann Shanahan, Anson Soderberry, Mitchell L. Springer, Joseph D. Thomas, Yoon Yeo, Daoguo Zhou

GUESTS: Debbie Fellure, Brandi Plantenga, Korena Vawter

I. MINUTES

The October 2020 Graduate Council meeting minutes were approved via the Qualtrics Survey.

II. DEANS REMARKS AND REPORTS

Dean Linda Mason

- The Office of Professional Development held over 135 workshops for Graduate students for the Fall semester with 6600 registrations and did not have the advantage of Fall Blitz. We increased registrations over last fall by 2,200 registrations. Offering the workshops online has increased attendance by 8% and allows the Regional Campuses to participate.
- A summary report on the National Data Transparency project across Graduate Schools across the country will be sent out to the GEA members and Department Heads and Graduate contacts with the survey being

conducted by the Big 10 Institutions on what worked and what did not work this semester. Flexibility that can be offered to Graduate students is critical especially at this time. Concerns that some departments will not offer individual Zoom licensing for meetings and students are spending their own money on PPE for teaching or research labs.

- Data indicates that Purdue does not have COVID transmission in the classroom on the Purdue campus as well as the Regional Campuses. Contact tracing indicates the transmission concerns are out in the community when people are not wearing mask and are out in large groups. One case has been reported of a suspicious transmission within a lab of close contact of sharing equipment.
- Students will be required to be tested for COVID before coming back to campus after the winter break in January. Students can start testing December 21 for return to campus or within 2 weeks of their first day on campus.
- Last day for International students to come to the United States is February 17, 2021 so that ISS can clear them and get that information to the Federal Government.
- Anyone traveling out of the country must be tested and quarantined for 14 days. This will be required, even if the student has been vaccinated in their home country due to us not being able to verify the vaccine. Currently, the vaccine will not stop you from getting COVID – it only makes the cases less severe so spread is still possible.
- CDC is recommending that if traveling domestically, you should quarantine also.
- There are three ways a student can be cleared for campus administratively, understanding we will not have a new online cohort that students can move into for graduate students.
- Form 19, Request for Off-campus Ph.D. or Master's Research for any activity that students will be off campus.
- Form 12, Research in Absentia for Ph.D. students who have passed prelims and finished coursework.
- The Change in Duty Station form for students who are working off campus.
- For 698/699 credits that do not have syllabus, faculty should have a discussion with the students about the deliverables for the semester. Faculty then go into My Purdue and check the box noting this discussion and that students are registered under the CRN for 698/699 credits. Should a faculty member not go in to My Purdue and a student receives an unsatisfactory grade and there is a grade appeal, the Graduate School will most likely not support the faculty member because the expectations were not written out and documented in the system.
- The first degree will be awarded by the Graduate School for the Master of Science degree in Graduate Studies with a Major in Interdisciplinary Studies approved by the Indiana Commission for Higher Education. The first degree will be with the College of Education and the Brian Lamb School of Communication with their corporate training and communication

leadership degree combining certificates from both colleges with additional classes. The STEM Education degree in the College of Education will combine a licensure with Indiana State for teaching in STEM Education.

- Discussions with Purdue University Global Dean's and the opportunity for partnerships since they have a law school. Different teams will be involved with the next discussions.
- It is important to start discussions within the programs to think creatively about how programs could grow in the long term.

III. AREA COMMITTEE REPORTS (Area Committee Chairs)

Graduate Council Document 20G, Graduate Council Documents Recommended for Approval. See Appendix B. Voted via Qualtrics survey.

IV. NEW BUSINESS

- a) Joy Colwell presented the Purdue Northwest Enrollment Report. The complete report is posted on the Graduate School website.
<https://www.purdue.edu/gradschool/faculty/enrollment.html>
- b) Dr. David Skalnik presented the IUPUI Enrollment Report. The complete report is posted on the Graduate School website.
<https://www.purdue.edu/gradschool/faculty/enrollment.html>

V. OLD BUSINESS

James Mohler, Associate Dean of the Graduate School

- The grad SERU report provides an overview for 40 Graduate School programs at Purdue University West Lafayette.
- The report has been provided to Deans and Associate Deans. Department Heads will have access to in December.
- Results from a survey regarding Students' Experience at Research Universities that recruited currently enrolled graduate students during the spring of 2019.
- Overview has three gradSERU measures which the program excels, and three for which its performance lags the average at PWL, if any.
- The report provides 20 measures on four dimensions of the academic experience at a SERU institution. 1) Campus Climate, 2) Advisor, 3) Professional Development, and 4) Students' Health & Wellness.
- Encourage students to take the gradSERU in the spring.
- Task Force Committee to discuss distance exams. The policy has been that one member of an exam committee could serve via distance. With COVID this has changed.
- Survey was sent to faculty and students indicates both are in favor as an option.

- The Task Force Committee will discuss: 1) Do we allow this beyond COVID? 2) Guidelines/Policy should technology fail and the student is not able to finish their exam.

Melanie Morgan, Associate Dean of the Graduate School

- The Graduate School does not require the GRE; it is an individual department decision.
- The GRE is not a requirement for the Chappelle, Carver, and Knox recruitment fellowships.
- Dr. Kevin Gibson, a Graduate Fellow Faculty member in the College of Agriculture has conducted workshops for faculty to understand holistic admission. Dr. Gibson is available to discuss the benefits and negatives regarding the GRE.

Tom Atkinson, Associate Dean of the Graduate School

- The unified application data indicates 1,787 have been submitted on the West Lafayette campus and 15% of those are second choice applications on this campus and 5% are third choice applications.
- 54 applications at the Purdue Northwest campus for Fall with one third of those are second choice applications and 42% are third choice applications.
- 60 applications at the Purdue Fort Wayne Campus for Fall with 25% as second choice applications and 10% as third choice applications.

Linda Mason, Dean of the Graduate School

- The Task Force will look further in depth the spring semester on graduate housing and pay for graduate students on the West Lafayette campus.
- Cost of Living Survey will be reported at the beginning of the semester from a graduate student in the College of Agriculture.
- Final report of the cost of living done with focus groups by an outside company Foundation for building graduate housing.

The council meeting was adjourned by Dean Mason at 2:30 p.m.

Linda J. Mason, Chair

Tina L. Payne, Secretary

APPENDIX A

PENDING DOCUMENTS

(November 2020)

BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

Area Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):
*Graduate Council Document 20-11c, **SLHS 66100, Advanced Medical Audiology (PWL)***

Area Committee B, Engineering, Sciences, and Technology (Dulcy M. Abraham, chair; dulcy@purdue.edu):
*Graduate Council Document 20-19a, **ME 53500, Design and Modeling of Fluid Power Systems (PWL)***

Area Committee F, Management Sciences (Nicole J. Widmar; chair, nwidmar@purdue.edu):
*Graduate Council Document 20-54a, **EC0N 53700, Health Economics (PWL)***
*Graduate Council Document 20-54b, **EC0N 53800, International Economics (PWL)***
*Graduate Council Document 20-33j, **MGMT 63450, Financial Statement Analysis And Valuation (PWL)***

APPENDIX B

GC Document 20-G

DOCUMENTS RECOMMENDED FOR APPROVAL BY THE GRADUATE COUNCIL November 2020

GRADUATE COURSE PROPOSALS:

Area Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):

*Graduate Council Document 20-11c, **SLHS 66100, Advanced Medical Audiology** (PWL) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3.*

The clinical practice of audiology encompasses the audiological assessment and habilitation/rehabilitation of hearing loss arising from a wide variety of medical and environmental etiologies. It is essential that audiologists have a firm understanding of the most common causes and medical treatments of hearing impairment for all age groups. Additionally, the future clinician will be better served by recognizing the how rapidly information changes in this arena and becoming comfortable with reliable educational resources that are available for life-long learning in this area. Audiologists also practice in a medical setting and thus must be comfortable with the medical approaches and terminology used by otolaryngologists, otologists, neuro-otologists, pediatricians, radiologists, anesthesiologists and other physicians. Additionally, audiologists may be the first contact with a hearing-impaired patient and their role in the referral process will be emphasized. Typically offered Spring.

<https://purdue.curriculog.com/proposal:14097/form>

Area Committee B, Engineering, Sciences, and Technology (Dulcy M. Abraham, chair; dulcy@purdue.edu):

*Graduate Council Document 20-19a, **ME 53500, Design and Modeling of Fluid Power Systems** (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.*

Introduction to fluid power technology. Design of hydraulic systems for mobile and industrial application for functionality, cost and energy efficiency. Modeling strategies for fluid power systems. Labs and class projects are given to reinforce the design and modeling learning projects.

<https://purdue.curriculog.com/proposal:10685/form>

Area Committee F, Management Sciences (Nicole J. Widmar; chair, nwidmar@purdue.edu):

*Graduate Council Document 20-54a, **EC0N 53700, Health Economics** (PWL) Sem. 1 and 2. SS. Distance (2 or 3 credits). Lecture 3 times per week for 90 minutes for 8 weeks (3 credit). Lecture 2 times per week for 90 minutes for 8 weeks (2 credit). Lecture/Distance Hybrid. Credit 2 or 3.*

This course is designed to introduce masters' students in economics to the field of health economics. We will analyze health and health care theories, institutions, and key policy issues. The course covers how the markets for health and health services are different from other goods, with a particular emphasis on the role of government and market failure. We will examine the demand for and the production of health and health care, and the behavior and organization of health care providers. We will also explore information asymmetries and the functioning of health insurance markets. We will consider health and healthcare systems around the world, paying particular attention to the U.S. health care system and recent reforms to it. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14317/form>

*Graduate Council Document 20-54b, **EC0N 53800, International Economics** (PWL) Sem. 1 and 2. SS. Distance (2 or 3 credits). Lecture 3 times per week for 90 minutes for 8 weeks (3 credits). Lecture 2 times per week for 90 minutes for 8 weeks (2 credits). Lecture/Distance Hybrid. Credit 2 or 3.*

The course covers selected topics in international trade with a focus on real world applications. Prerequisites = Intro to Statistics, Intro in Math, Microeconomics. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14318/form>

*Graduate Council Document 20-33j, **MGMT 63450, Financial Statement Analysis And Valuation** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes (3 credits). Lecture 2 times per week for 90 minutes (2 credits). Distance and Hybrid. Credit 2 or 3.*

MGMT 63450 is designed to prepare students to become intelligent financial statement users. Understanding how market participants use financial statements will assist professionals in their primary tasks of creating and communicating financial information to these individuals.

Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14464/form>

NEW DOCUMENTS RECEIVED
(After the November 19, 2020 Graduate Council Meeting)

Area Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):

*Graduate Council Document 21-1a, **EDPS 50701, Foundational Techniques For Telemental Health Providers** (PWL) Sem. 1 and 2. SS. Distance/Lecture 120 minutes per meeting/1 asynchronous meeting per week/8 week term. DIS/LAB 40 minute per meeting/1 meeting every 2 weeks/8 week term. Credit 3.*

The purpose of this course is to provide a broad overview of individual therapy with adults via telemental health using a videoconferencing platform. Within this course, students will develop general, foundational knowledge related to pre-screening adults for individual therapy, conducting intakes with adult clients, engaging in individual therapy sessions with adult clients, terminating with adult clients, and managing risk with adult clients. Additionally, this course offers a brief overview of telemental health therapy with children, couples, families, and groups.

This course is taught in an asynchronous manner and uses various strategies to facilitate student learning, which include: discussion boards, case studies, role plays, self-assessment papers, and pre-recorded lectures with associated PowerPoint slides. Access to necessary technology and resources, which includes but is not limited to: stable internet access, Brightspace, a telemental health or associated platform, and a computer, is required to complete the course. Typically offered Fall Spring Summer.

*Graduate Council Document 20-60a, **OLS 57200, Integration Of Project Management For Leaders** (IUPUI) Sem. 1 and 2. SS. Lecture 1 time per week for 120 minutes. Credit 3. Prerequisites: OLS 57100 or INFO-B 505 Informatics Project Management or instructor approval. C is the lowest passing grade in either course for admission to OLS 57200.*

This course emphasizes critical analysis, synthesis, and evaluation of theories and applications of project management knowledge and skills, leadership, communication, and stakeholder engagement. Students integrate theoretical and applied skills in planning, distributing, and managing communication; analyzing and interpreting project organization in context; and applying best practices in team management. Typically offered Fall Spring Summer.

Area Committee B, Engineering, Sciences, and Technology (Dulcy M. Abraham, chair; dulcy@purdue.edu):

*Graduate Council Document 20-19h, **ME 52000, Imaging-Based Computational Hemodynamics For Cardiovascular Assessment** (IUPUI) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: ME 31002, or BME 44200, or equivalent (consent of the instructor)*

Image-based computational hemodynamics is a newly-emerged computational technique for non-invasive and patient-specific assessment of cardiovascular diseases based on medical imaging data. In this course, students will learn (1) concepts and principles of cardiovascular

circulation in the human body and imaging modalities for cardiovascular diseases; (2) image-based computational modeling methods for quantification of hemodynamics (velocity, pressure, and wall-shear stress) in human vessels based on CT/MRI and Doppler ultrasound imaging data; and (3) computational analysis to assess the severity of cardiovascular diseases. Team projects to non-invasively assess the severity of arterial stenosis in renal, iliac, and coronary arteries via quantification of trans-stenotic pressure gradient and/or fractional flow reserve will provide first-hand experience of how computational modeling and analysis can contribute to medical innovation and advanced precision medicine. Typically offered Fall Spring Summer.

Graduate Council Document 20-19i, **ME 57400, Additive Manufacturing** (IUPUI) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: Graduate standing or instructor's consent.

During this course, students evaluate the engineering aspects and physical principles of available AM technologies (binder and material jetting, sheet lamination, vat photopolymerization, directed energy deposition, powder bed fusion, and material extrusion technologies) as well as these technologies' most relevant applications and criteria in order to successfully select the AM technology that is best suited for the embodiment of a particular design (material compatibility, interface issues, strength requirements). The topics of this course are grouped into three modules: (1) AM Technologies (2) Design for AM (3) AM Process Planning. During the first module (50% of the course), the historical development of AM is examined and then the underlying physical principles of current AM technologies are evaluated. The second module (25% of the course) focuses on investigating the mathematical principles and technical aspects of design optimization methods for AM (including topology optimization). The third module (25% of the course) incorporates product evaluation (mechanical properties and dimensional accuracy), process optimization, and applications. Students taking this course will create original products using CAD/CAE systems and topology optimization tools. Students will hone skills on image post-processing, segmentation, vectorization, and generation of STL files. Students also will execute tasks using several 3D printers and manipulate different AM technologies including material extrusion, vat photopolymerization, and powder-bed fusion. They will also have the opportunity to visit local industries and interact with AM practitioners. This course is collaboratively taught by specialists in the areas of manufacturing, design, and materials. Typically offered Fall Spring Summer.

Graduate Council Document 20-21d, **MSTE 59900, Motorsports Advanced Internship** (IUPUI) Sem. 1 and 2. SS. Internship. Variable Credit 1 to 3.

Graduate-level based course, in an off-campus internship position. Internship must be in the area of Motorsports Engineering. Individual Internship must be preapproved by the supervising MSTE faculty member, before the student can register for the course. A written report must be submitted and approved by the faculty before credit is accepted. This course cannot be used to satisfy the minimum course requirements for the Master's degree. The project must be at the graduate engineering level, with elements that complement the MSTE MSE course work. The project must satisfy the agreement between the US industry where the CPT program is to be conducted and the MSTE faculty at IUPUI. The project must be an integral part of the MSTE MSE program. This issue is important for the International approval. The feedback from industry advisor together with the engineering research/design outcomes as seen by the MSTE faculty,

will determine the final grade of the course. Permission of instructor required. Typically offered Fall Spring Summer.

Area Committee E: Life Sciences, (Timothy Lescun, chair; tlescun@purdue.edu):

*Graduate Council Document 21-2a, **AGRY 60100, Introduction To Graduate Research** (PWL) Sem. 1 and 2. Lecture 1 time per week for 100 minutes for 8 weeks per term. Credit 1.*

The course provides a framework for graduate studies. It helps the new graduate student understand the roles and responsibilities in graduate education, providing guidance for scientific reading, writing, and research activities. Topics include understanding ethical issues in science, enhancing their ability to communicate with a broad range of people, and establishing initial perspectives on professional development. Permission of department required. Typically offered Fall Spring.

*Graduate Council Document 21-3a, **BIOL 50401, Mammalogy** (PFW) Sem. 2. Lecture 2 times per week for 50 minutes. Laboratory 1 time per week for 170 minutes. Credit 3. Prerequisites: BIOL 21700, Graduate, or Permission from Instructor.*

The class explores approaches to mammalian research and wildlife management through readings, discussions, field, and laboratory exercises. Topics such as mammalian behavior, ecology, phylogeny, taxonomy, and conservation are emphasized. The intention of this class is to help students who have a sincere interest in mammalian research and management to progress beyond identification in their understanding of mammals. Typically offered Spring.

*Graduate Council Document 21-3b, **BIOL 51501, Non-Mendelian Genetics** (PFW) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: BIOL 21800 (C- or better), Graduate, or Permission from Instructor.*

In this course students will explore topics and papers on genetic and environmental sources of variation in inherited disorders. This includes but is not limited to epistatic and other pathway influences, complex (multigenic) diseases, quantitative traits, genetic modifiers, environmental risk factors, gene x environment interactions. Students will look at primary research that identifies examples of these factors, both in human disease and in animal models of disease. They will also complete a miniature proposal, in which they will identify a human disease or disease model that is subject to phenotypic variation. They will propose an experiment to either characterize the impact of a modifying factor on that disease, or a way to screen for/identify modifying factors. We will have in-class time to work on this project during the Journal Club/Workshop portion of the course. Permission of instructor required. Typically offered Fall.

*Graduate Council Document 21-3c, **BIOL 58301, Environmental And Agricultural Microbiology** (PFW) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: BIOL 21900; minimum grade of C or better.*

Introduction to the ecosystem-wide impacts of microorganisms in the various habitats on earth and their effects on agriculture. Students will learn and evaluate various methods of sample collection and detection, understand biogeochemical cycling, remediation of pollutants by microorganisms and be able to elaborate on microbial interactions in natural ecosystems.

Students will gain and apply knowledge on bioinformatic, genomic, proteomic and metabolomic approaches to the study of environmental microorganisms. The optional laboratory section will enable students to apply techniques for isolating and growing soil and aquatic microorganisms. Typically offered Spring.

Graduate Council Document 21-3d, BIOL 58301, Environmental And Agricultural Microbiology (PFW) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: (PFW) Sem. 2. Laboratory 1 time per week for 110 minutes. Credit 1. Prerequisites: BIOL 21900; Minimum grade of C. Co-requisite: BIOL 58301.

The lab will enable students to apply techniques for isolating and growing soil and aquatic microorganisms. Students in the lab section will apply molecular biological and biochemical techniques for analyzing such microbes. Students will participate in an inquiry-based laboratory project to perform a case study on microbes relevant to agriculture. The optional laboratory section can be taken only by students enrolled in the lecture section. The lecture is a co-requirement for the lab. Typically offered Spring.

Graduate Council Document 20-58a, NSCI 55900, Endocrinology (IUPUI) Sem. 1 and 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: BIOL 55600 or equivalent and CHEM-C342.

The study of hormone function. Consideration will be given to the role of hormones in growth, development, metabolism, homeostasis, and reproduction. Typically offered Fall Spring.