

**PURDUE UNIVERSITY
GRADUATE SCHOOL**

Minutes of the Graduate Council Meeting
March 25, 2021
1:30 p.m.

Sixth Meeting

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

PRESENT: Linda J. Mason, chair, Council Members, Dulcy M. Abraham, Raida Abuizam, Thomas W. Atkinson, David S. Cochran, Joy Colwell, G. Jonathan Day, Eric D. Deemer, Bryan DeWitt, Duane D. Dunlap, Emad Elwakil, Levon Esters, Keith B. Gehres, Margaret Gitau, Richard H. Grant, Chong Gu, Patricia Hart, Erla Heyns, Timothy B. Lescun John A. Morgan, Madelina Nuñez, Tina L. Payne, Paul Salama, Abraham Schwab, Ann Shanahan, John A. Springer, Jill Sutor, Joseph D. Thomas, Candiss B. Vibbert (Provost's Representative), Eric Waltenburg, Nicole J. Widmar, Yoon Yeo,

APOLOGIES FOR ABSENCE RECEIVED FROM: Christopher K. Belous, Janice S. Blum, Steven J. Burdick, James L. Mohler, Melanie Morgan, David G. Skalnik, Mitchell L. Springer

ABSENCES: Christopher R. Agnew, Suzanne C. Bart, Rita A. Burrell, Paul F. Muzikar, Zhan Pang, Anson Soderberry, Chenn Zhou, Daoguo Zhou

GUESTS: Debbie Fellure, Korena Vawter

I. **MINUTES**

The February 2021 Graduate Council meeting minutes were approved via the Qualtrics Survey.

II. **DEANS REMARKS AND REPORTS**

Dean Linda Mason

- Spring Commencement face to face
- Email will be sent for hooding of Ph.D. students
- Opening vaccine for 16 and up
- Many students did not receive the email on housing reminding them to renew contracts for next year. Data is being gathered on students not receiving the email to accommodate those who did not get their renewals in on time.

- Students are being charged different rates to rent apartments if you are a married couple versus two single individuals. This is not legal as you cannot charge according to family status. Information will be sent out to students.
- Nicole Widmar, Patty Hart and Nush Powell will work with the Associate Deans for Graduate Education in Agriculture and Science along with the treasurer of PGSG to come up with a recommendation for stipends to present to the council for consideration. The Council's recommendation will be made once the report is finalized.
- Dean Mason's initiatives for next year on mentoring,
 - Department mentoring in what does good mentoring look like?
 - How do you mentor diverse students with the Board of Trustees Equity Task Force? When bringing in more minority students, how do you mentor a minority student if one is uncomfortable in those discussions?
 - Career mentoring through students path in graduate school to prepare for multiple career opportunities. Speakers will be brought in to have discussions from both the student perspective and the faculty perspective.
- Many departments do not respond to students whether it is yes or no and their application just sits there waiting for a response. When a student does not receive notification and has paid the \$65 they deserve to be notified. This does not represent Purdue well. After speaking with the Provost, Dean Mason will look at ways to receive applications within a certain period of time so that students are not held up waiting for Purdue to tell them yes or no.
- When doing departmental reviews, Dean Mason noted that many handbooks are out of date or non-existent. When students are admitted under the rules that are under consideration and the handbook is not updated, they do not know what their expectations are. We need to keep a current version and old versions. Starting next year, we will find a systematic way to make sure all handbooks are updated and current.

III. AREA COMMITTEE REPORTS (Area Committee Chairs)

Graduate Council Document 21D, Graduate Council Documents Recommended for Approval. See Appendix B. Voted via Qualtrics survey.

IV. PRESENTATION

Lisa Nielsen, Ph. D. Grant Writer and Director of the Postdoctoral Office presented information on Grant Writing and Resources for Graduate Students and Postdocs.

Dr. Nielsen offers:

Fellowship Office Resources

Overview

- The Grant Writer who helps students and postdocs
- GRAD 550: Fellowship and Grant Application Writing Class
- Writing Consultations
- Workshops
- Online Resources

GRAD 55000: Fellowship and Grant Application Writing

Pass/No-pass Class offered Spring and Summer Semesters

- Open to all masters and PhD students in research-based programs
- Students write drafts for a fellowship or grant during the semester
- Discussion-based class with collaboration with peers from different research areas
- This course fills up quickly – interested students are encouraged to contact Dr. Nielsen to be placed on the interest list or current wait list.

GRAD 59000: Fellowship and Grant Writing “Light”

- A new grant writing concepts course available for those who want to receive the content without required writing assignments
- Offered asynchronous and online for independent completion
- Pass/No-pass, 1.0 credit hour
- Offered each semester with plenty of space in the course for anyone who wants to take it

Writing Consultations

Feedback on Drafts and One-on-one Writing Discussions

- Students email (lnielse@purdue.edu) their fellowship application drafts or requests to meet.
- Either Dr. Nielsen or one of the Fellowship Writing Coaches will provide feedback on drafts.

Fellowship and Grant Writing Workshops

Fellowship-specific Sessions for Grad Students

- NSF Fellowships series
- NDSEG (Defense) Fellowship
- Ford Foundation Fellowship (various fields)
- USDA NIDA, NC-SARE (Agriculture)

Postdoc Grant Writing Series

- Funding Agencies, Solicitations, and Grant Components
- Logic Flow

- Postdoc Fellowship Application Strategies
- Long Research Statements
- Extreme Editing

Additional Sessions

- “How to” Series
- Interactive Learning Series
- CLA Grant Writing Workshop
- Cancer Research Fellowships

Funding Agency Sessions for Postdocs

- CLA Grant Writing Workshop
- NIH F32, K99/R00 Information Session

Student and Postdoc Participation

Reaching More Students and Postdocs

- 2,848 students and postdocs have attended a Fellowship Office workshop since August 2018. Of that number, 536 students and postdocs attended the Fall 2020 workshops
- Fellowship Office Hours: Since May 2020, 86 students have attended the Office Hours sessions online.

Fellowship and Grant Writing Resources Page

Wiki page managed by the Fellowship Office

<https://wiki.itap.purdue.edu/display/FellowshipAndGrantWriting>

- Anyone with a Purdue username and password can access

Online Access to Winning Fellowship Examples

Winning Graduate Fellowship Applications

- Important for students to see examples for formal writing, organization, and formatting
- Box Folder (online) with electronic copies
- Email Lisa at lnielse@purdue.edu to request access

V. PURDUE GRADUATE STUDENT GOVERNMENT -- PRESIDENT’S REPORT

Madelina Nuñez, President of the Purdue Graduate Student Government (PGSG)

- Graduate Student Appreciation Week is April 5th-9th
- April, and final, Immigration Attorney Session scheduled for April 27th at 5 PM EST

VI. POSTHUMOUS DEGREE REQUEST

Graduate Council Document 21-C, Request to Award a Posthumous Degree, submitted by The Department of Curriculum and Instruction.

Dr. Atkinson presented Graduate Council Document 21-C, Request to Award a Posthumous Degree, which stated that the late Melissa Esh met the University's requirements for the conferral of a posthumous Doctor of Philosophy degree. During the review of Ms. Esh's records, the following were noted:

- Ms. Esh began her Purdue University graduate program in the Fall of 2011. Initially, she enrolled in the interdisciplinary graduate program in American Studies. Later, Ms. Esh transferred to the Department of Curriculum and Instruction, effective with the Spring semester of 2015.
- Ms. Esh's plan of study for the Ph.D. degree in Curriculum and Instruction was approved on October 31, 2017. The plan of study included 63 credits, all of which have been completed. Eighteen credits, taken at Ball State University, are part of the plan of study.
- Ms. Esh's plan of study focused on concentrations in Curriculum Studies and in Women's Gender and Sexuality Studies.
- Ms. Esh passed her preliminary examination on April 16, 2019.
- In addition to her course credits, Ms. Esh successfully completed 90 credits of EDCI 69900 during the period from Spring 2015 through Summer 2020.

Given that Ms. Esh's research has been approved and two articles have been prepared and will be submitted for publication, it is Dr. Tom Atkinson's conclusion that Ms. Esh fully meets the requirements to receive a posthumous Doctor of Philosophy degree.

A motion was made by Dulcy Abraham. The council unanimously approved the request. The request will be forwarded to the Office of the President for final approval.

VII. CLOSING REMARKS

Dr. Tom Atkinson

- Will prepare a resolution to ask the Graduate Council's approval of a new English Proficiency Test after July 1st.
- This is Educational Testing Services product called the TOEFL Essentials Test. It is a shorter English Proficiency test and the cost is about half of what the TOEFL IBT cost. April Ginther will present information at the April meeting.

Dr. Linda Mason

- Looking at adding representatives from every department to the Graduate Council to be able to take information back to each area. A diversity of ideas would be better represented from each department.

The council meeting was adjourned by Dean Mason at 2:40 p.m.

Linda J. Mason, Chair
Tina L. Payne, Secretary

APPENDIX A

PENDING DOCUMENTS

(February 2021)

BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

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

Graduate Council Document 21-14a, ASEC 53100, Global Learning For Agriculture, Food And Natural Resources (PWL)

Graduate Council Document 21-8a, EDCI 61450, Seminar In Bilingualism And Multilingualism (PWL)

Graduate Council Document 21-1b, EDPS 50702, Addressing Demographic Health Disparities In Telehealth (PWL)

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

Graduate Council Document 21-9c, CGT 52200, UX Design Graduate Studio I: Fundamentals (PWL)

Graduate Council Document 21-9a, CGT 52400, Model-Based Definition in the Digital Enterprise (PWL)

Graduate Council Document 21-9d, CGT 53200, UX Design Graduate Studio II: Cross-Channel (PWL)

Graduate Council Document 21-9b, CGT 54300, Experimental Animation (PWL)

Graduate Council Document 21-10a, CNIT 54200, Design-Based Research Applications (PWL)

Graduate Council Document 21-10a, CNIT 61700, Cyberphysical Security Seminar: Research Topics In Cyberphysical Security (PWL)

Graduate Council Document 21-7a, ME 53900, Introduction To Scientific Machine Learning (PWL)

Graduate Council Document 21-7b, ME 54100, Engineering Design: A Decision-Based Perspective (PWL)

Graduate Council Document 19-39c, MSE 67000, Atomistic View of Materials: Theory, Modeling And Simulations (PWL)

Area Committee D, Humanities and Social Sciences (Jill Sutor, chair; jsutor@purdue.edu):
Graduate Council Document 21-15a, POL 60900, Advanced Applied Research Design (PWL)
Graduate Council Document 21-15ba, POL 68500, Professional Development Practicum (PWL)

Area Committee E: Life Sciences, (Timothy Lescun, chair; tlescun@purdue.edu):
Graduate Council Document 21-3a, BIOL 50401, Mammalogy (PFW)
Graduate Council Document 21-6a, HSCI 54601, Advanced Industrial Hygiene Control Technology Project (PWL)
Graduate Council Document 21-6b, HSCI 54800, Advanced Industrial Hygiene Instrumentation Techniques (PWL)
Graduate Council Document 21-6c, HSCI 54801, Advanced Industrial Hygiene Instrumentation Techniques Project (PWL)
Graduate Council Document 21-6d, HSCI 55301, Advanced Occupational Safety Management And Culture Project (PWL)
Graduate Council Document 21-6e, HSCI 58001, Occupational Biomechanics And Ergonomics Laboratory (PWL)
Graduate Council Document 21-5a, VCS 60500, Supervised Surgical Laboratory Training In Small Animal Surgical Techniques And Approaches Assessment (PWL)

Area Committee F, Management Sciences (Nicole J. Widmar; chair, nwidmar@purdue.edu):
Graduate Council Document 21-4a, MGMT 56001, Master of Accountancy Program Assessment (PNW)

CERTIFICATE(S):

Area Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):
Graduate Council Document 21-13a, Graduate Certificate in School Administration, submitted by the School of Education, PFW

Area Committee B, Engineering, Sciences, and Technology (Dulcy M. Abraham, chair; dulcy@purdue.edu):
Graduate Council Document 21-11a, Graduate Certificate in Project Management, submitted by the Dept. of Technology, Leadership, and Communication, PIU

MAJOR(S):

Area Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):
Graduate Council Document 21-12a, Graduate Major in Information Security, submitted by the Graduate School Administration, PWL

APPENDIX B

GC Document 21-D

DOCUMENTS RECOMMENDED FOR APPROVAL BY THE GRADUATE COUNCIL MARCH 2021

GRADUATE COURSE PROPOSALS:

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

Graduate Council Document 21-14a, ASEC 53100, Global Learning For Agriculture, Food And Natural Resources (PWL) Sem. 2. SS. Lecture 2 times per week for 75 minutes. Experiential. Credit 3.

This is a graduate-level course in which students research, design, and evaluate communication and education methods and theoretical frameworks to apply appropriate cultural, community engagement, targeted outcomes of a population defined by the student. The central experience is an international/intercultural professional development experience immersed in rural and urban communities and cultures. Students will learn and develop global perspectives and effective engagement strategies to address agronomic, cultural, and community engagement realities affecting agriculture, life sciences and natural resources. Typically offered Spring Summer.

<https://purdue.curriculog.com/proposal:14974/form>

Graduate Council Document 21-8a, EDCI 61450, Seminar In Bilingualism And Multilingualism (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.

This course examines theories, research and educational practices in bilingualism and multilingualism. Students will become familiar with major conceptual and methodological issues in research about the use and acquisition of two or more languages in bi/multilingual societal and educational contexts. Individual and societal dimensions will be considered through the examination of a wide range of approaches. Accordingly, the course is transdisciplinary in nature, bringing together work from anthropology, education, psychology, and (socio)linguistics. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:15569/form>

Graduate Council Document 21-1b, EDPS 50702, Addressing Demographic Health Disparities In Telehealth (PWL) Sem. 1 and 2. SS. Distance. Lecture 1 time per week for 120 minutes for 8 weeks. Credit 3.

The practice of tele-mental health is expanding rapidly. This expansion reflects both increased opportunities afforded by technological advances within the healthcare field, as well as pressing needs to resolve persistent healthcare disparities associated with in-person services. As part of the Certificate in Telemental Health Counseling, this course will prepare students to take a systematic view of the challenges and opportunities of transitioning live practices to telehealth, by preparing students to Identify demographic telemental health disparities at local, national, and international levels; describe key barriers that produce demographic telemental health disparities; generate a telemental health access toolkit to address demographic disparities within a specific practice and/or field. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14979/form>

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

Graduate Council Document 21-9c, CGT 52200, UX Design Graduate Studio I:

Fundamentals (PWL) Sem. 1. Studio 1 time per week for 170 minutes *or* Lecture 2 times per week for 50 minutes and Laboratory 2 times per week for 50 minutes *or* Laboratory 1 time per week for 170 minutes. Credit 3.

This course is an introduction to the fundamental components of human-centered design, focusing on interactive computing systems. Students learn basic tenets and methods of user-centered design, including usability and visual design principles, user research, low-fidelity prototyping, and high-fidelity prototyping. The course is platform-independent and encourages students to experiment with new and emerging technologies. Typically offered Fall

<https://purdue.curriculog.com/proposal:14188/form>

Graduate Council Document 21-9a, CGT 52400, Model-Based Definition in the Digital Enterprise (PWL) Sem. 1 and 2. Distance. Credit 3.

This course will explore Model-based definition (MBD), an emerging industry technique that uses 3D CAD models with annotations to communicate information between people and equipment instead of using drawings. This technique results in reduced variability during data translation, more accurate product definition information and wider dissemination of product data through an increasingly digital corporate enterprise. Typically offered Fall Spring.

<https://purdue.curriculog.com/proposal:12620/form>

Graduate Council Document 21-9d, CGT 53200, UX Design Graduate Studio II: Cross-

Channel (PWL) Sem. 2. Studio 1 time per week for 170 minutes *or* Lecture 2 times per week for 50 minutes and Laboratory 2 times per week for 50 minutes *or* Laboratory 1 time per week for 170 minutes. Credit 3.

This course is an advanced exploration of cross-channel approaches to human-centered design, such as service design, that span digital and physical experiences. Students utilize principles of usability and user experience to create and evaluate physical prototypes. The course is platform-independent and encourages students to experiment with new and emerging technologies. Typically offered Spring.

<https://purdue.curriculog.com/proposal:14266/form>

Graduate Council Document 21-9b, CGT 54300, Experimental Animation (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 50 minutes. Laboratory 1 time per week for 150 minutes. Credit 3.

This course introduces key theoretical and applied concepts of experimental animation. Evolving technology consistently provides new opportunities for experimental practices in animation production. In this course, students will engage with experimental creative practices including abductive reasoning, abstraction, generative animation, motion graphics, simulations, glitch, and mixed digital media. These experimental animations are suitable for a wide range of outputs including experimental short film, installation, projection mapping and a range of online platforms. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14282/form>

Graduate Council Document 21-10a, CNIT 54200, Design-Based Research Applications (PWL) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3.

The course provides an opportunity for students to study and apply design-based research to evaluate and improve learning environments. Specifically, the course focuses on using design-based research as a methodological approach to combine instructional design and research in a cyclical and interdependent manner. Students are expected to apply this approach with the goal of simultaneously solving practical problems and developing a sharable theory by connecting design features to valued outcomes. Typically offered Spring.

<https://purdue.curriculog.com/proposal:10336/form>

Graduate Council Document 21-10a, CNIT 61700, Cyberphysical Security Seminar: Research Topics In Cyberphysical Security (PWL) Sem. 1. Lecture 1 time per week for 150 minutes. Credit 3.

This course meets the requirements of a research seminar for the CIT graduate program. Students focusing on homeland security and related research areas are encouraged to take this course to expand their knowledge of the field in general and in their specific research areas. The students will present their research to one another to gain knowledge of topics in the subject area. The student numbers will include PHSI student research assistants, interns, and students focused on homeland security research topics. The creation of this course will provide these students more structure for engagement, learning and research. Students taking the course will construct a research paper formatted for publication in a homeland security research journal. This course will also promote the interdisciplinary nature of homeland security from information technology to public policy generation and agent-based computer modeling. Permission of Instructor required. Typically offered Fall.

<https://purdue.curriculog.com/proposal:12233/form>

Graduate Council Document 21-7a, ME 53900, Introduction To Scientific Machine Learning (PWL) Sem. 2. Lecture 2 times per week for 75 minutes. Distance. Credit 3. Prerequisite(s): Working knowledge of probability and numerical methods for engineers at the level of Introduction to Probability (MA 41600), and Numerical Methods in Mechanical Engineering (ME 58100).

Introduction to the fundamentals of predictive modeling for advanced undergraduates and graduate science and engineering students that work in the intersection of data and theory. Typically offered Fall.

<https://purdue.curriculog.com/proposal:13795/form>

Graduate Council Document 21-7b, ME 54100, Engineering Design: A Decision-Based Perspective (PWL) Sem. 2. Lecture 2 times per week for 75 minutes. Distance. Credit 3.

Multi-objective decision making under risk and uncertainty; Group decision making; Sequential decision making; Model-based and data-driven decision making; Heuristics and biases in design decision making. Applications to engineering design including estimation of customer preferences, simulation-based design, and sustainable design. Typically offered Spring.

<https://purdue.curriculog.com/proposal:13715/form>

Graduate Council Document 19-39c, MSE 67000, Atomistic View of Materials: Theory, Modeling And Simulations (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: BS degree in materials, mechanical, chemical, electrical or aerospace engineering or in physics or chemistry.

In “Atomistic View of Materials: Theory, Modeling & Simulation” students will be introduced to the fundamental physics required to describe materials in terms of electrons and atoms, learn how these processes relate to macroscopic behavior and become familiar with advanced modeling and simulation techniques that enable quantitative predictions. Students will gain hands-on experience with several simulation tools, including ab initio calculations using density functional theory, molecular dynamics simulations and other advanced modeling techniques.

<https://purdue.curriculog.com/proposal:9271/form>

Area Committee D, Humanities and Social Sciences (Jill Suitor, chair; jsuitor@purdue.edu):

Graduate Council Document 21-15a, POL 60900, Advanced Applied Research Design (PWL) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: POL 60000 with grade of B or better.

The main goal of this seminar is to guide graduate students when preparing their Ph.D. dissertation proposals. The seminar aims to do two things. The first is to provide an overview of the crucial research design tools and research planning considerations that can help students plan and carry out better dissertation projects. The second is to offer a structured forum where students can present and receive feedback on their dissertation proposals. With permission from the Director of Graduate Studies, this course may be repeated and used to support the development of a grant proposal or research publication. Typically offered Spring.

<https://purdue.curriculog.com/proposal:15037/form>

Graduate Council Document 21-15ba, POL 68500, Professional Development Practicum (PWL) Sem. 1 and 2. Lecture 1 time per week for 50 minutes. Experiential 1 time per week for 50 minutes for 8 weeks. Credit 1.

This course examines the ethics, norms, and expectations of the profession of political science and public policy for those engaged in doctoral level study. The course explores topics of

professional development to support progress in the degree and building a successful career. Topics each semester vary. Permission of department required. Typically offered Fall Spring.
<https://purdue.curriculog.com/proposal:15105/form>

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

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.
<https://purdue.curriculog.com/proposal:15219/form>

Graduate Council Document 21-6a, HSCI 54601, Advanced Industrial Hygiene Control Technology Project (PWL) Sem. 2. Independent Study 1 time per week for 50 minutes. Credit 1. Prerequisites: HSCI 34600.

Students study the various techniques needed to control hazards in the workplace. Engineering controls are placed in effort to reduce or remove the hazard at the source by isolating the worker from the hazard. Permission of instructor required. Typically offered spring.
<https://purdue.curriculog.com/proposal:15008/form>

Graduate Council Document 21-6b, HSCI 54800, Advanced Industrial Hygiene Instrumentation Techniques (PWL) Sem. 2. Lecture 2 times per week for 50 minutes. Laboratory 2 times per week for 50 minutes. Credit 3. Prerequisites: HSCI 34500.

This course covers sophisticated field and laboratory instrumentation and techniques, sampling methodology for organic vapors, dust, fibers, noise, and heat; calibration and validation techniques; emphasis on critical analysis of data. Typically offered Spring.
<https://purdue.curriculog.com/proposal:15063/form>

Graduate Council Document 21-6c, HSCI 54801, Advanced Industrial Hygiene Instrumentation Techniques Project (PWL) Sem. 2. Independent Study 1 time per week for 50 minutes. Credit 1. Prerequisites: HSCI 34800.

This course covers sophisticated field and laboratory instrumentation and techniques, sampling methodology for organic vapors, dust, fibers, noise, and heat; calibration and validation techniques; emphasis on critical analysis of data. Permission of instructor required. Typically offered Spring.
<https://purdue.curriculog.com/proposal:15064/form>

Graduate Council Document 21-6d, HSCI 55301, Advanced Occupational Safety Management And Culture Project (PWL) Sem. 2. Independent Study 1 time per week for 50 minutes. Credit 1. Prerequisites: HSCI 35300.

The Occupational Health and Safety Manager assumes a critical role within an organization – protecting the employees from suffering work-related injuries, illnesses, and fatalities. This job requires a number of approaches to achieve this aim, including employee training, hazard identification and abatement, safety policy development, and incident investigation. The health and safety manager often forms a bridge between upper management and front line employees. As such, the successful health and safety manager needs to skill sets which transfer across organizational levels. Permission of instructor required. Typically offered Fall.

<https://purdue.curriculog.com/proposal:15065/form>

Graduate Council Document 21-6e, HSCI 58001, Occupational Biomechanics And Ergonomics Laboratory (PWL) Sem. 1. Laboratory 1 time per week for 100 minutes. Credit 1. Prerequisites: PHYS 23300 and PHYS 23400. Co-requisite(s): HSCI 58000.

This course will be the laboratory component for HSCI 58000, Occupational Biomechanics and Ergonomics. Laboratory exercises will accompany and illustrate each topic discussed during the lecture course. An ergonomic project will allow the students to evaluate an individual performing a job and provide ergonomic recommendations to improve the work situation. The course will also emphasize report writing, teamwork, and communication skills. Typically offered Fall. <https://purdue.curriculog.com/proposal:15067/form>

Graduate Council Document 21-5a, VCS 60500, Supervised Surgical Laboratory Training In Small Animal Surgical Techniques And Approaches Assessment (PWL) Sem. 1 and 2. SS. Laboratory 1 time per week for 240 minutes. Each lab is 4-8 hours long and there are only 3 labs in the semester. Credit 1.

Small animal neurosurgical, orthopedic and soft tissues approaches, techniques, and procedures practiced in cadaver labs. Only graduate students enrolled in an American College of Veterinary Surgeons or American College of Veterinary Internal Medicine - Neurology/Neurosurgery residency will be eligible. Permission of instructor required. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14222/form>

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

Graduate Council Document 21-4a, MGMT 56001, Master of Accountancy Program Assessment (PNW) Sem. 1 and 2. SS. Distance. Credit 0.

Students will be required to engage in assessment activities such as the Accounting and Business Case Study, Core Business Knowledge Exam, and Master of Accountancy Exit Survey as determined by the Faculty of the College of Business. This is a zero credit course but is graded Pass/No Pass. Students are required to take this course during their final semester of the MAcc Program.

There are two aspects to the MAcc assessment: (1) Major Fields Test (MFT), which requires the completion of an individual standardized assessment covering general business knowledge, and (2) Assurance of learning (individual) case covering globalization, corporate social responsibility, critical thinking, and written communication. The assessments are administered by the Graduate Curriculum Committee. Typically offered Fall Spring Summer.

<https://purdue.curriculog.com/proposal:14664/form>

CERTIFICATE(S):

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

Graduate Council Document 21-13a, Graduate Certificate in School Administration, submitted by the School of Education, PFW

<https://purdue.curriculog.com/proposal:15071/form>

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

Graduate Council Document 21-11a, Graduate Certificate in Project Management, submitted by the Dept. of Technology, Leadership, and Communication, PIU

<https://purdue.curriculog.com/proposal:14301/form>

MAJOR(S):

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

Graduate Council Document 21-12a, Graduate Major in Information Security, submitted by the Graduate School Administration, PWL

<https://purdue.curriculog.com/proposal:14014/form>

NEW DOCUMENTS RECEIVED

(After the March 25, 2021 Graduate Council Meeting)

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

Graduate Council Document 21-27a, TLI 54000, Smart Manufacturing Enterprise: Organizational Behavior And Leadership In The Digital Enterprise (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

Smart manufacturing is about increasing efficiency and eliminating pain points in your system. It's characterized by a highly connected, knowledge-enabled industrial enterprise where all organizations and operating systems are linked, leading to enhanced productivity, sustainability, and economic performance. Implementing smart manufacturing techniques

requires an effective understanding of organizational behavior and leadership skills required for the new digital enterprise. This knowledge of individuals' perceptions, attitudes, and behavior enables leaders to choose appropriate leadership styles and managerial practices to increase organizational effectiveness and positive human outcomes. This course will provide an overview of organizational behavior and leadership concepts important for implementing change within a smart manufacturing enterprise. Typically offered Fall Spring Summer.

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

Graduate Council Document 21-10c, CNIT 51900, Natural Language Technologies (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3.

This course serves as an introduction to natural language processing with the focus on current and emerging technologies and applications. The topics will review the state of the art of natural language processing, discuss their advantages and disadvantages for computational language processing, and look at some case studies. The assignments will range from pen and paper analysis to actual computational implementations. Typically offered Fall, Spring, Summer.

Graduate Council Document 21-10d, CNIT 69100, Natural Language In Information Assurance, Security, And Privacy (PWL) Sem. 1 and 2. Lecture 2 times per week for 75 minutes. Credit 3.

This course will serve as a seminar in natural language applications with the emphasis in information assurance, security, and privacy. The topics will review the state of the art of general information assurance, security, and privacy with the focus on natural language text and information received from and implied in it. The course will focus in a wide range of papers describing various techniques and applications, with identifiable advantages and disadvantages. The assignments will range in class paper presentations to group projects and written reports. Typically offered Fall Spring.

Graduate Council Document 21-26a, CS 57600, Machine Learning (PFW) Sem. 1 and 2. Lecture 1 time per week for 150 minutes. Credit 3.

Machine Learning is concerned with computer programs that "automatically" improve their performance through experience (based on data). As an introductory course to machine learning, the course introduces the fundamentals of modern machine learning. It will give a broad overview of many concepts and algorithms in machine learning, ranging from supervised learning to unsupervised learning. Topics include decision tree learning, instance-based learning, perceptron and linear modeling, probabilistic modeling, neural networks, support vector machines, ensemble learning, learning theory, and unsupervised learning with clustering. This course will provide a combination of theoretical knowledge and practical, hands-on experience in solving real-world problems through the application of machine learning. Basic computer science concepts, data structure, algorithm, programming experience, knowledge of linear algebra, basic statistics, and probability is required.

Graduate Council Document 21-7c, ME 55401, Design For IP Protection And Commercialization (IUPUI) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: Undergraduate engineering/technology design coursework or instructor permission.

Present topics of intellectual property (IP) such as copyright, trademark, and trade-secret, topics directed to patents including a thorough introduction to subject matter eligibility, novelty, and non-obviousness as well as topics related to enablement and written description requirements of a patent and how each of these concepts can affect design choices. Learn how to navigate patent databases. Develop patentable designs, as well as designs that do not infringe on existing IP. Learn about technology commercialization from an IP perspective.

Area Committee C: Chemistry, Engineering, and Physical Sciences, John Morgan; chair, jamorgan@purdue.edu):

Graduate Council Document 21-20d, CHE 56400, Organic Electronic Materials And Devices (PWL) Sem. 1 and 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): CHM 26100 or equivalent (CHM 25500 or CHM 25700).

This course introduces the synthesis, optoelectronic properties, transport physics, and device operation of organic and hybrid electronic materials and devices. This course will review how the molecular architecture of small molecule and polymer semiconductors can be tuned to alter the optoelectronic properties of the materials in solution and in the solid state. A number of relevant materials interactions will be covered, including: photoexcitation and recombination, intermolecular charge transport mechanisms, and energy transfer processes. Additionally, we will observe how these processes are relevant to applications such as organic field-effect transistors (OFETs), organic light-emitting diodes (OLEDs), organic photovoltaic (OPV) devices, and organic memory elements. Finally, a new type of organic-inorganic hybrid material called hybrid halide perovskite will be introduced. Typically offered Fall Spring.

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

Graduate Council Document 21-28a, FNR 59000, Introduction To Teaching In Natural Resources (PWL) Sem. 1 and 2. Lecture 1 time per week for 50 minutes. Credit 1. Prerequisite(s): Graduate status in FNR or instructor approval.

This applied course introduces topics related to teaching science courses to facilitate and support the success of teaching assistants in Forestry and Natural Resources. Students will read and review assigned readings and then participate in a discussion at a weekly class meeting. Students also will have an opportunity to practice and apply concepts through development and presentation of a lesson plan. Permission of instructor required.

Graduate Council Document 21-28b, FNR 59100, Teaching In Natural Resources Practicum (PWL) Sem. 1 and 2. Laboratory 1 time per week for 100 minutes. Credit 1 or 2. Prerequisite(s): Graduate status or instructor approval.

This practicum course provides students with an opportunity to gain teaching experience in natural resource courses. This course is only open to students that are not being paid as teaching

assistants. Permission of Instructor required.

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

Graduate Council Document 21-4de **MGMT 65330, HR Strategy** (PWL) Sem. 1 and 2. Lecture (3 Credit) 3 times per week for 90 minutes for 8 weeks. Lecture (2 Credit) 2 times per week for 90 minutes for 8 weeks. Distance or Lecture/Distance Hybrid. Credit 2 or 3.

Survey of theory and techniques used in human resource management within organizations. Emphasis is placed on HRM, Strategic HRM, Managing Human Resources Globally, and Strategically Managing Human Resource Functions.

Graduate Council Document 21-4df **MGMT 65390, HR Analytics** (PWL) Sem. 1 and 2. Lecture (3 Credit) 3 times per week for 90 minutes for 8 weeks. Lecture (2 Credit) 2 times per week for 90 minutes for 8 weeks. Distance or Lecture/Distance Hybrid. Credit 2 or 3.

This course provides an introduction to the field of HR analytics. HR Analytics is an advanced set of data analysis methodologies, tools and metrics for comprehensive workforce performance measurement and improvement. The objective of HR analytics is to drive evidence-based decisions and action in the workplace. In addition to your instructor, you may hear from expert practitioners and corporate leaders who have “been there and done that” leveraging a myriad of HR analytics along the way. We will also review (and hopefully expand) your understanding of handling data including conceptualizing models, identifying key metrics, collecting data, analyzing data, and presenting data in ways that tell a powerful story. Throughout our course, I will infuse consulting concepts, methodologies, and lessons learned that combined with your analytic skills will help you to effectively serve as an HR Business Partner (internal HR consultant).

Graduate Council Document 21-4dg **MGMT 65410, Training And Development** (PWL) Sem. 1 and 2. Lecture (3 Credit) 3 times per week for 90 minutes for 8 weeks. Lecture (2 Credit) 2 times per week for 90 minutes for 8 weeks. Distance or Lecture/Distance Hybrid. Credit 2 or 3.

This course prepares students to design training and develop training programs and to identify principles, practices and methods of staff training and career development. Students will learn and practice how to deliver and evaluate said programs for return on investment (ROI). Emphasis is placed on the application of principles related to adult learning, instructional design and program development, evaluation and learning technologies. Specific objectives include topics related to communication, diversity, generational differences and group dynamics.

Graduate Council Document 21-4d, **MGMT 65460, Talent Acquisition** (PWL) Sem. 1 and 2. Lecture (3 Credit) 3 times per week for 90 minutes for 8 weeks. Lecture (2 Credit) 2 times per week for 90 minutes for 8 weeks. Distance or Lecture/Distance Hybrid. Credit 2 or 3.

This course focuses on the effective management of the flow of talent into and through organizations. It covers workforce planning, recruiting and selection, career transitions, and other workforce movements. It is designed to teach students the skills to recruit and select the best talent to help drive organizational strategy. Students will also learn how to design a process and framework for final individual or group selection. Lastly, they will learn several strategies to successfully orient and onboard new employees.

Graduate Council Document 21-4dh **MGMT 65470, Talent Management (PWL)** Sem. 1 and 2. Lecture (3 Credit) 3 times per week for 90 minutes for 8 weeks. Lecture (2 Credit) 2 times per week for 90 minutes for 8 weeks. Distance or Lecture/Distance Hybrid. Credit 2 or 3.

This course focuses on the employer-employee relationship and how managers work with employees to improve their performance. Attention is given to Talent, Talent Management, and Performance Management in work settings, with an emphasis, however, on contemporary approaches to managing the employer-employee relationship and the systems for managing talent. Various definitions of Employee Engagement will be explored, along with how it is, measured, and why it is so important to your organization. Finally, various methods to engage employees in the organization will be studied.