PURDUE UNIVERSITY
GRADUATE SCHOOL

Minutes of the Graduate Council Meeting
October 21, 2021
2:30 p.m.

Second Meeting
Via Zoom

PRESENT: Linda J. Mason, chair, Council Members, Raida Abuizam, Christopher R. Agnew, Kola Ajuwon, Yong Bao, Christopher K. Belous, Steven J. Burdick, David S. Cochran, Joy Colwell, G.Jonathan Day, Bryan DeWitt, Emad Elwakil, Keith B. Gehres, Margaret Gitau, Chong Gu, Erla Heyns, Randolph D. Hubach, Troy D. Janes, Ann L. Kirchmaier, Douglas J. LaCount, Timothy B. Lescun, Jiliang Li, Yanjun Li, Melanie Morgan, Tina L. Payne, Paul Salama, Megan Sapp Nelson, Abraham Schwab, Ann Shanahan, Michael G. Smith, John A. Springer, Jill J. Suitor, Joseph D. Thomas, Eric Waltenburg, William R. Watson, Christine Wuenschel

APOLOGIES FOR ABSENCE RECEIVED FROM: Thomas W. Atkinson, Janice S. Blum, Eric D. Deemer, Levon Esters, Kevin D. Gibson, Jeffrey P. Greeley, Tong Jin Kim, Judith Lewandowski, James L. Mohler, Madelina Nuñez, Jenna Rickus (Provost's Representative), Chenn Zhou

ABSENCES: Suzanne C. Bart, Zhan Pang

GUESTS: Debbie Fellure, April Ginther, Sean McCan, Sharry Vahed, Korena Vawter

I. MINUTES

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

II. DEANS REMARKS AND REPORTS

Dean Linda Mason

- Continuing with the town halls. Successful input from graduate students as well as undergraduates asking for information on graduate education.
- The town halls are being held at different colleges to meet with graduate students specifically from these programs. It has been helpful for graduate students to be able to tell us what is working and what is not working for

them that the Graduate School can change or work with the colleges that could be changed.

- The Fall Blitz Professional Development brought in scientist who did a series of workshops on:
    - How to apply to industry
    - How to convert an academic CV into a resume using algorithms that industry uses
- The first Graduate Diversity Visitation had 35 students in attendance noting that Purdue is their first choice to get a graduate degree. Discussion with graduate students what mentoring looks like. Help was given by the Professional Development Office for completing the application. Advised on the Bridge Program and what is being done for Equity Taskforce work.
- The group of students who attended the Bridge Program this past summer will continue to participate within the Bridge Program the next two years. Those students indicated having that initial cohort allows them to connect and build friendships. The second group will be visiting next week with the College of Agriculture and the College of Engineering. We ask that you reach out and encourage these students in your programs.
- The COVID policy for vaccinations and screening of students not vaccinated are required to be screened randomly that could be every week or every other week.
- International students struggling with understanding those polices. They were confusing the COVID vaccination with the other vaccinations required by state law when students arrive. A second email was sent to students that had not uploaded their vaccination records for the non-COVID related vaccine to help them become compliant. The Graduate School held a special hands on session helping international students upload their COVID vaccination records. Remind students who have not been vaccinated to schedule an appointment to be tested when they receive an email from Protect Purdue.
- Continue to poll Ph.D. students when looking at overall graduate rates. Dean Mason asked the Graduate Council for assistance of what we could do better to understand what our graduate students are struggling with and what is delaying their time to degree.
- Continue to struggle with faculty in documenting and checking the box on research documentation. There will be a change when registration opens for spring that faculty can go in and start those discussions and check the box early rather than waiting the week before classes begin.
- Commencement ceremonies for Ph.D. students on the West Lafayette campus will continue to be held separate and Masters will be held with the colleges this Fall. Spring Commencement will be held with both Ph.D. and Master's due to the growth in enrollment.
- Richard Kuhn was the speaker at the Ph.D. ceremony at the Summer Commencement making connections between graduate education and their work as Ph.D. students. Will plan to look for speakers interested in addressing Graduate students in the future.

- Dean Mason will speak to the Board of Trustees in the Spring to present the role of graduate education to better understand how different graduate education is in comparison to the undergraduate world. 1) How to sell the value of graduate education at an institution such as Purdue and how it is growing and changing. 2) We have the traditional Master's and Ph.D. students. 3) How the online enrollment is growing and changing. We have our non-traditional online graduate students and non-degree seeking students who are coming to look at our stackable degrees that are growing.
- We are working with Teresa Meyer in the Office of the Vice President of Research and Partnership on gaining data on the sponsored programs that come in and the percent of graduate students that are paid on sponsored programs compared to faculty. For those that are on research track graduate programs is what we are trying to make a connection for them with that research part of the institution. Dr. Meyer will be the speaker at the November Graduate Council meeting to discuss the research mission.
- We will continue to hold the Graduate Council meetings in the virtual mode as the Graduate Council membership grows which allows graduate information to be passed on to the faculty in all departments.
- Dean Mason noted a special thank you from Tina Payne for the amazing job the Area Committee Chairs and committees are doing in reviewing the large number of proposals.

Melanie Morgan

- Policy change made in the documents required for admittance.
  1) Accepting unofficial documents to admit on unofficial transcripts. For many students, especially from Iran it is very expensive to get an official transcript which would be one months salary. Students did not want to pay for that one copy to wait for an admission letter when they had applied to other colleges. 2) The date that students have to verify that those documents are official will be pushed back to March 1st from October 1st. Some students from other countries only produce transcripts once or twice a year. If students are not able to verify by the March 1st deadline, they will be able to complete the spring semester; however, they will not be able to register for the next semester.

III. AREA COMMITTEE REPORTS (Area Committee Chairs)
Graduate Council Document 21K, Graduate Council Documents Recommended for Approval. See Appendix B. Voted via Qualtrics survey.

IV. PRESENTATION

Erla Heyns, Associate Dean for Learning, in the Libraries and School of Information Studies gave a presentation on the Libraries and School of Information.

Libraries available during COVID shutdown

- Hicks Undergraduate Library remained open
- Only library in the BTAA to remain open
- Hours were: 8am-5pm Mon-Fri
- Services provided: Wi-Fi, computers, printing, study space, community
- Ask-A-Librarian
- HSSE Reconfiguration for student study

What does the University Copyright Office (UCO) do?

- Advises the university on copyright law and compliance
  - Fair use
  - F2F and online courses
  - Publishing contracts

- Provides programs, workshops, and lectures
  - Responsible Conduct for Research
  - 4-H Entrepreneurship Academy
  - Visual and Performing Arts

- Journal of Purdue Undergraduate Research (JPUR)
  - The *Journal of Purdue Undergraduate Research* has been established to publish outstanding research papers written by Purdue undergraduates from all disciplines who have completed faculty-mentored research projects.

- Purdue Journal of Service Learning (PJSL)
  - The *Purdue Journal of Service Learning* aims to globally advance service-learning and academic civic engagement by sharing prominent scholarly work in a tangible, centralized, public manor.

Archives & Special Collections

- Examples of our world renowned collections
- Barron Hilton Flight and Space Exploration Archive
  - Preserving the history of flight and space exploration as experienced by Purdue University alumni, educators, and researchers in engineering, aeronautics, and astronautics.

- Betsy Gordon Psychoactive Substances Research Collections
  - Materials in this collection area document the history psychedelic medicine. The collections illustrate how psychedelic research has been carried out and

facilitated how patients have responded to these treatments, and how policy and culture have affected the research.

- Susan Bulkeley Butler Women's Archive
  - The Susan Bulkeley Butler Women's Archives collects, preserves, and makes available for research original and rare materials that capture the often overlooked and underrepresented stories of women and their communities in Purdue and Indiana's past.

- The numbers…
  - 2,859 - total number of archival and manuscript collections
  - 17, 735 - cubic feet (does not include e-Archives)
  - 98 - archival and manuscript collections acquired in 2020-2021
  - 44,712 - visits
  - 733, 530 - page reviews

- Documenting a Global Pandemic
  - The COVID -19 pandemic impacted all aspects of Purdue University, prompting faculty, students, and staff to create new ways of teaching and learning, discovery, engagement, and social interaction. The Provost's Office, WBAA, and the University Archives, part of the Libraries and School of Information Studies, have partnered to create the Purdue COVID Stories Project. This project will result in an archive of oral history interviews, written memoirs, photographs and related materials exploring the many ways COVID-19 has affected the Purdue Community.

Office of Undergraduate Research (OUR)

- What does the OUR do?
  - Serves as a central resource to promote and expand experiential learning for undergraduate students through research experiences with skilled research mentors.
  - Works with everyone connected with undergraduate research, from prospective and actively engaged undergraduate researchers to research mentors (faculty, staff, graduate students, and post-docs), program administrators, and university administrators.

- UG Resources include:
  - OURConnect Matching Portal
  - One-on-One Consultations
  - UG Research Conference & Symposia
  - Research Roundtables
  - Research Courses Series

- Faculty/Staff Resources include:
    - Grant Funding
    - Seminars
    - Mentorship
    - Program Design & Implementation

Purdue University Research Repository (PURR)

- Research date management for Purdue faculty, staff, and students
    - Plan – Meet funders' data requirements with our helpful resources and expert advice.
    - Collaborate – Your own file sharing space and update feed make team collaboration easy.
    - Publish – Publish your data, get a DOI, and track your impact. Leave archiving to us.

- PURR Services
  Plan – Collaborate – Publish – Archive – Measure
    - Data Management Planning
    - Project Management
    - Dataset Publication
    - Archiving
    - Impact Measurement

School of Information Studies

- Curriculum
    - 39 courses
- Instruction
    - IMPACT
    - Guest Lectures
- Learning Communities
    - Engineering in the World of Data
    - Krannert Leaders Academy
    - Data Mine
    - Team HTM

W. Wayne Booker Chair in Information Literacy

- About the Booker Chair in Information Literacy
    - Clarence Maybee, Booker Chair in Information Literacy
    - Leads and develops campus partnerships that foster the widespread integration of information literacy interdisciplinary courses at Purdue

- Advances information literacy research at Purdue, nationally and internationally
- Leads and collaborates on funded projects with other academic institutions
- Expands the national reputation of Purdue as a leader in information literacy

IMPACT

- Instruction Matters: Purdue Academic Course Transformation
  - Advances strategy by enhancing the students' learning experiences.
  - As founding partners since its inception in 2011, Libraries faculty partner with instructors to improve pedagogy and learning outcomes by integrating information and data literacy into courses.
  - 385 – faculty completed the program
  - 12 – colleges and schools have participated
  - 354/326 courses redesigned in program/additional courses redesigned after
  - 88% - of undergrads have been enrolled in at least one IMPACT course

Library Certificates

- Certificates – Two graduate certificates are available in:
  - Digital Humanities (co-sponsored by the College of Liberal Arts)
  - Geographic Information Sciences (collaboration seven colleges at Purdue)
- Libraries also co-sponsors and undergraduate Digital Humanities Certificate with the College of Liberal Arts.

Libraries Courses

Both graduate and undergraduate courses are offered in fields such as:

- Information and Data Literacy
- Digital Humanities and Geographic Information Systems
- Systematic Reviews
- Digital Citizenship and Information Ethics
- Foundational Concepts in Undergraduate Research

Courses include: Information Strategies for HTM, Introduction to Research Essentials, Critical Data Studies, Digital Humanities Foundations, and more.

Committed to Sustainable Scholarship

Goals: Openness, Transparency, and Financial Sustainability

- BTAA Collaborations
  - Consortial licensing program. Member libraries can expect to realize cost savings, operation efficiencies, and to exert influence over the scholarly publishing market.
- Renegotiations of Elsevier Contract

- Allows us to repurose those funds to support programs and initiatives we typically are unable to afford because most of our money is tied up in large journal contacts.
- $1.5M in savings from renegotiation

- Resource Sharing Partnerships
  - Purdue has numerous resource sharing relationships that enable us to acquire content we do not own on behalf of our users. We are not a lending institution, meaning we lend more than we borrow.

Committed to Student Affordability

Resource Models

- Access vs. Ownership
  - Shifting the model of an effective academic research library from one of ownership to one of access and finding new ways to provide access to scholarly resources that does not require subscriptions or purchases.
- Patron Driven Acquisition Model for e-Books
  - Allows our users to request titles and have access to significantly more titles meeting immediate needs versus purchasing in case it is needed.
- Open Education Resources (OERs)
  - Open educational resources are freely accessible, openly licensed text, media, and other digital assets that are useful for teaching, learning, and assessing, as well as for research purposes. Purdue University has been a member of the Open Education Network since 2013. Primary Contact: Nina Collins (nkcollin@purdue.edu)

Committed to Enhancing Access

- **Course Reserves**
  - When a course material can be licensed electronically for campus, Libraries will acquire, if possible. Instructors are encouraged to contact Libraries in advance of the semester with course reserves requests. $46K save on course materials in AY21 https://www.lib.purdue.edu/course_reserves#courseReserves

- **Reading Lists**
  - Oure new online course reserves system allows instructors to assemble electronic resources to create a structured, comprehensive reading lists (subject to copyright).
  - https://guides.lib.purdue.edu/LibraryReadingLists

- **Subject Specialists**
  - Subject specialists can be consulted to find resources we already have in our collection or resources that are freely available. Visit: https://www.lib.purdue.edu/help/askalib/librarians

Facilities & Spaces

- **Libraries**
  - Aviation & Transportation Technology Library
  - Black Cultural Center Library
  - Hicks Undergraduate Library
  - Humanities, Social Science, & Education Library
  - Library of Engineering and Science
  - Mathematical Sciences Library
  - Parrish Library of Management & Economics
  - Veterinary Medical Library

Use of Resources

- **Student Library Usage**
  - Library spaces are popular for study and collaboration
  - Students need places to focus and study outside of their "home" environment
  - Specialized spaces and technology can be reserved for projects

Libraries Facilities Master Plan

- **Dean of Libraries committed to having student centered spaces**
  - **Evaluate space needs**
    - Enrollment scenarios
    - Percent of online delivery
  - **Identify mix of study space types and capacities**
    - Class schedules
    - Renovation vs New construction
    - Group vs Individual space needs
  - **Conceptualize physical location of study and library space**
    - Campus growth over next 10 years
    - Physical space needs over next 10 years

V. NEW BUSINESS

a) Dr. Melanie Morgan presented the West Lafayette Fall 2021 Enrollment Report. The complete report is posted on the Graduate School website. https://www.purdue.edu/gradschool/faculty/enrollment.html

b) Dr. Abraham Schwab presented the Fort Wayne Fall 2021 Enrollment Report. The complete report is posted on the Graduate School website. https://www.purdue.edu/gradschool/faculty/enrollment.html

The council meeting was adjourned by Dean Mason at 3:30 p.m.

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

APPENDIX A

PENDING DOCUMENTS

(October 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 21-8b,* EDCI 55850, Introduction To Teaching Engineering And Technology Design In The Context Of K-12 Integrated STEM (PWL)**
***Graduate Council Document 21-8c,* EDCI 55950, Engineering And Technology Design Practicum (PWL)**
***Graduate Council Document 21-1d,* EDPS 50703, Introduction To Telemental Health Assessment And Intervention (PWL)**
***Graduate Council Document 21-1e,* EDPS 52400, Effective Instruction For Students With Significant Reading Difficulties (PWL)**
***Graduate Council Document 21-1f,* EDPS 52700, Literacy Curricula For Learners With Exceptionalities (PWL)**
***Graduate Council Document 21-1g,* EDPS 55400, Positive Learning Environments And Classroom Management (PWL)**
***Graduate Council Document 21-1h,* EDPS 56601, Clinical Practice Experience II (Student Teaching (PWL)**
***Graduate Council Document 21-49a,* EDU 61000, School System Leadership, Planning & Improvement (PFW)**
***Graduate Council Document 21-49b,* EDU 61200, School Leader Advocacy, Educational Policy & Governance (PFW)**
***Graduate Council Document 21-49c,* EDU 61300, Equity, Inclusion, & The Culturally Responsive Curriculum (PFW)**
***Graduate Council Document 21-49d,* EDU 64000, Instructional Leadership & Learning Systems (PFW)**
***Graduate Council Document 21-49e,* EDU 65000, The School Community And External Leadership (PFW)**
***Graduate Council Document 21-49f,* EDU 65500, School District Operations & Management (PFW)**
***Graduate Council Document 21-49g,* EDU 66000, Strategic Leadership In Schools (PFW)**
***Graduate Council Document 21-49h,* EDU 67000, Ethical Dimensions Of Leadership Within School Culture (PFW)**
***Graduate Council Document 21-49i,* EDU 68000, Talent Development And Performance Management In Schools (PFW)**
***Graduate Council Document 21-4j,* EDU 69700, Talent Development And Performance Management In Schools (PFW)**
***Graduate Council Document 21-40a,* HONR 59901, Research Mentorship Development Program (PWL)**

***Graduate Council Document 21-35b,* OLS 50701, Quantitative Analysis And Analytics For Leaders (IUPUI)**
***Graduate Council Document 21-35a,* OLS 51600, Diversity, Equity, And Inclusion For Organizational Leaders (IUPUI)**
***Graduate Council Document 21-31a,* PUBH 52500, Statistical Methods For Public Health Evaluation (PWL)**
***Graduate Council Document 21-31b,* PUBH 54700, Public Health Program And Policy Evaluation (PWL)**
***Graduate Council Document 21-31b,* PUBH 60800, Culminating Experience (PWL)**

Area Committee B, Engineering, Sciences, and Technology (John A. Springer, chair; jaspring@purdue.edu):
***Graduate Council Document 21-10e,* CNIT 54100, Cyberlearning Research And Development (PWL)**
***Graduate Council Document 21-41a,* ECE 51501, Smart Grid (IUPUI)**
***Graduate Council Document 21-41b,* ECE 53401, Embedded Autonomous Systems In Automotive Platforms (IUPUI)**
***Graduate Council Document 21-41c,* ECE 58500, Automotive Control (IUPUI)**
***Graduate Council Document 21-45a,* ECET 54400, Real-Time and Embedded Systems (PWL)**
***Graduate Council Document 21-7k,* ME 50106, Industrial Energy Audit (IUPUI)**
***Graduate Council Document 21-7f,* ME 50801, Orthopaedic Tissue Mechanics (IUPUI)**

***Graduate Council Document 21-7d,* ME 53503, Model-Based Systems Engineering (IUPUI)**
***Graduate Council Document 21-7e,* ME 53504, Systems Driven Product Development (IUPUI)**
***Graduate Council Document 21-7g,* ME 55801, Composite Materials For Automotive Applications (IUPUI)**
***Graduate Council Document 21-7h,* ME 55802, Design And Analysis Of Materials And Structures In Lightweight Vehicles (IUPUI)**
***Graduate Council Document 21-7i,* ME 57101, Probabilistic Engineering Design (IUPUI)**
***Graduate Council Document 21-7j,* ME 61201, Continuum Mechanics (IUPUI)**
***Graduate Council Document 21-7L,* ME 65500, Computational Mechanics Of Materials (IUPUI)**
***Graduate Council Document 21-34a,* TCM 56000, Technical And Scientific Communication In Academic Contexts (IUPUI)**

Area Committee C: Chemistry, Engineering, and Physical Sciences, Margret Gitau, chair; mgitau@purdue.edu):
***Graduate Council Document 21-48a,* BME 54500, Orthopaedic Tissue Mechanics (IUPUI)**
***Graduate Council Document 21-20e,* CHE 52300, Engineering Applications Of Biological Molecules (PWL)**
***Graduate Council Document 21-20f,* CHE 56000, Introduction To Energy Storage Systems (PWL)**

Area Committee D, Humanities and Social Sciences (Jill Suitor, chair; jsuitor@purdue.edu):
***Graduate Council Document 21-16a,* AMST 60600, American Studies Methods (PWL)**
***Graduate Council Document 21-43a,* COM 65100, Organizational Culture And Internal Communication (PWL)**
***Graduate Council Document 21-43b,* COM 65200, Communication Education And Training (PWL)**

Area Committee E: Life Sciences, (Timothy Lescun, chair; tlescun@purdue.edu):
***Graduate Council Document 21-3g,* BIOL 66201, Professional Development (PFW)**
***Graduate Council Document 21-44a,* BMS 52900 Basic Bone Biology (PWL)**
***Graduate Council Document 21-46a,* CPB 61100 Veterinary Pathology Literature Review Seminar (PWL)**
***Graduate Council Document 21-28b,* FNR 59100, Teaching In Natural Resources Practicum (PWL)**
***Graduate Council Document 21-30a,* NUR 62501, DNP Role In Knowledge Translation Within Healthcare Delivery Systems (PNW)**
***Graduate Council Document 21-30c,* NUR 62601, Applied Biostatistics For Outcome Evaluation (PNW)**
***Graduate Council Document 21-30d,* NUR 64101, Principles Of Epidemiology (PNW)**
***Graduate Council Document 21-30e,* NUR 64210, Systems Approaches To Health Care Engineering (PNW)**
***Graduate Council Document 21-30b,* NUR 67801, Health Economics And Finance (PNW)**
***Graduate Council Document 21-29a,* NUTR 51100, Applied Nutrition Counseling (PWL)**
***Graduate Council Document 21-29c,* NUTR 51200, Dietary Supplements (PWL)**
***Graduate Council Document 21-29d,* NUTR 51300, Food Chemistry (PWL)**
***Graduate Council Document 21-29m,* NUTR 52100, Advanced Medical Nutrition Therapy (PWL)**
***Graduate Council Document 21-29e,* NUTR 52200, Advanced Nutrition Communications (PWL)**
***Graduate Council Document 21-29f,* NUTR 52300, Trends In Nutrition & Dietetics (PWL)**
***Graduate Council Document 21-29b,* NUTR 52900 Basic Bone Biology (PWL)**
***Graduate Council Document 21-29h,* NUTR 53100, Ethical Practice And Professionalism In Dietetics (PWL)**
***Graduate Council Document 21-29g,* NUTR 53300, Community Nutrition Experience (PWL)**
***Graduate Council Document 21-29i,* NUTR 53900, Foodservice Systems Management Experience (PWL)**
***Graduate Council Document 21-29L,* NUTR 54200, Engagement Experience (PWL)**
***Graduate Council Document 21-29k,* NUTR 54300, Medical Nutrition Therapy Experience (PWL)**
***Graduate Council Document 21-29j,* NUTR 54400, Advanced Medical Nutrition Therapy For Special Populations (PWL)**

Area Committee F, Management Sciences (Chair TBD):
***Graduate Council Document 21-41a,* ECON 50000, Mathematics For Economists (PWL)**
***Graduate Council Document 21-41b,* ECON 50100, Statistical Analysis For Economists (PWL)**
***Graduate Council Document 21-41c,* ECON 53600, Public Economics (PWL)**
***Graduate Council Document 21-41d,* ECON 53900, Wage Discrimination (PWL)**
***Graduate Council Document 21-41e,* ECON 57600, Statistical & Machine Learning (PWL)**
***Graduate Council Document 21-41f,* ECON 57700, Quantitative Economics With Python (PWL)**
***Graduate Council Document 21-41g,* ECON 58400, Experimental Economics (PWL)**
***Graduate Council Document 21-41h,* ECON 59100, Financial Valuation And Decision Making (PWL)** ***Graduate Council Document 21-41i,* ECON 62400, Estimating Game Theoretic Models (PWL)**
***Graduate Council Document 21-41j,* ECON 64100, Agent-Based Computational Economics (PWL)** ***Graduate Council Document 21-41k,* ECON 64200, Computational Economics (PWL)**
***Graduate Council Document 21-41L,* ECON 65300, Topics In Early Childhood Development (PWL)**
***Graduate Council Document 21-41m,* ECON 65400, Topics In Empirical Labor & Public Economics (PWL)** ***Graduate Council Document 21-41n,* ECON 65500, Public Economics (PWL)**
***Graduate Council Document 21-41o,* ECON 65600, Labor Economics II (PWL)**
***Graduate Council Document 21-41p,* ECON 66200, Game Theory (PWL)**
***Graduate Council Document 21-41q,* ECON 67800, Search Theory And Applications (PWL)**
***Graduate Council Document 21-41r,* ECON 69100, Advanced Topics In Panel Data (PWL)**
***Graduate Council Document 21-41s,* ECON 69200, Advanced Topics In Time Series (PWL)**
***Graduate Council Document 21-41t,* ECON 69300, Bayesian Econometrics I (PWL)**
***Graduate Council Document 21-41u,* ECON 69400, Bayesian Econometrics II (PWL)**
***Graduate Council Document 21-41v,* ECON 69700, Thesis Research (PWL)**

DEGREE(S):

Committee A, Behavioral Sciences (G. Jonathan Day, chair; gjday@purdue.edu):
***Graduate Council Document* 21-39a, New Degree in Educational Specialist, submitted by the Department of Education, PFW**

Area Committee B, Engineering, Sciences, and Technology (John A. Springer, chair; jaspring@purdue.edu):
***Graduate Council Document 21-53a,* Ph.D. in Computer and Information Technology, submitted by the Department of Computer and Information Technology, PWL**

MAJOR(S):

Area Committee C: Chemistry, Engineering, and Physical Sciences, Margaret Gitau; chair, mgitau@purdue.edu):
***Graduate Council Document 21-47a,* Graduate Major in Applied Geospatial Data Analytics and Strategic Communications, submitted by the Graduate School Administration, PWL**

APPENDIX B

GC Document 21-K

DOCUMENTS RECOMMENDED FOR APPROVAL BY THE GRADUATE COUNCIL OCTOBER 2021

GRADUATE COURSE PROPOSALS:

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

Graduate Council Document 21-8b, **EDCI 55850, Introduction To Teaching Engineering And Technology Design In The Context Of K-12 Integrated STEM** (PWL) Sem. 1. Lecture 1 time per week for 150 minutes. Distance. Credit 3.

Engineering and technology design has gained considerable traction in many K-12 schools. In this course, we will examine principals of engineering design and technology as well as where and how engineering and technology design best fits in a K-12 integrated STEM curriculum. Course participants will engage in authentic engineering and technology design experiences. Course participants will also design, develop, and deliver integrated lessons that help K-12 students develop the knowledge, skills, and practices of engineering and technology design. **https://purdue.curriculog.com/proposal:17253/form**

Graduate Council Document 21-8c, **EDCI 55950, Engineering And Technology Design Practicum** (PWL) Sem. 1 and 2. SS. Laboratory 3 times per week for 60 minutes. Distance. Credit 3.

EPICS is a service-learning design course in which teams of students from across campus work together on long- term projects that benefit the community. Project work centers around

the engineering, technology, and computing needs of a community partner, but interdisciplinary team interaction is an integral element for project success. Students may participate in EPICS multiple semesters and participation for multiple consecutive semesters on a project team is encouraged. Teams are composed of first year students through seniors.

Most EPICS projects last at least one-year, though partnership with the community organization continues for several years. Projects are intended to solve real problems, are defined in partnership with their community partners, and span the complete design process cycle [problem identification - specification development - conceptual design - detailed design - delivery - service/maintenance – retirement].

You receive academic credit for participating in EPICS. How academic credits are applied to your major depends on your degree program and is determined by your department and/or advisor. See https://engineering.purdue.edu/EPICS/purdue/epics-purdue/credit.
https://purdue.curriculog.com/proposal:17255/form

Graduate Council Document 21-1d, **EDPS 50703, Introduction To Telemental Health Assessment And Intervention** (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 180 minutes for 8 weeks. Distance. Credit 3.
As part of the Certificate in Telemental Health, 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 apply intervention skills within a telehealth framework; identify key differences in telehealth procedures compared to in-person practice; apply skills for working with individuals, groups and families via telemental health processes and practices.
https://purdue.curriculog.com/proposal:16725/form

Graduate Council Document 21-1e, EDPS 52400, Effective Instruction For Students With Significant Reading Difficulties (PWL) Sem. 1 and 2. SS. Distance. Credit 3.
This course will explore significant reading difficulties, such as dyslexia, and essential components of effective reading instruction. This course will investigate scientifically-based reading research (SBRR), evidence-based and developmentally appropriate reading instruction and interventions to support students with exceptionalities.
https://purdue.curriculog.com/proposal:17163/form

Graduate Council Document 21-1f, **EDPS 52700, Literacy Curricula For Learners With Exceptionalities** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.
This course will explore research-supported general and specialized literacy curricula to prepare candidates to design and/or adapt instructional lessons and materials to meet the needs of students with exceptionalities.
https://purdue.curriculog.com/proposal:17165/form

Graduate Council Document 21-1g, **EDPS 55400, Positive Learning Environments And Classroom Management** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.
This course will focus on classroom PBIS practices to create positive learning environments (online and face-to-face), establish classroom expectations, and develop academic and behavioral

routines to meet the social, emotional, and behavioral needs of students with exceptionalities. EDPS 55400 will support candidates as they develop classroom practices that are positive and preventative in nature and align to larger school and district positive behavioral supports.
https://purdue.curriculog.com/proposal:17166/form

Graduate Council Document 21-1h, **EDPS 56601, Clinical Practice Experience II (Student Teaching** (PWL) Sem. 1 and 2. Experiential. Credit 1 to 6. Prerequisite(s): EDPS 56010.

This course is a supervised 16-week teaching experience in special education. Candidates assess, design and deliver lessons, manage student needs and behaviors, develop IEPs, integrate technology to enhance learning outcomes and communication, collaborate with families and colleagues, and analyze the experience of facilitating a classroom and caseload of students.
https://purdue.curriculog.com/proposal:17276/form

Graduate Council Document 21-49a, **EDU 61000, School System Leadership, Planning & Improvement** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term. Credit 3.

This course examines the role of district-level school leadership in creating a culture of continuous improvement through systems thinking, planning, and management that results in structures to monitor and ensure a comprehensive and equitable PK-12 educational program, contributing to the success of all students.
https://purdue.curriculog.com/proposal:17609/form

Graduate Council Document 21-49b, **EDU 61200, School Leader Advocacy, Educational Policy & Governance** (PFW) Sem. 1 and 2. SS. Online for 8 weeks Credit 3.

This course studies the role of district-level school leadership in advocating for favorable education policy that addresses the needs of PK-12 learners, schools, and local school communities and examines the leadership knowledge and skills required to coordinate decisions with local, state, and federal regulations that influence the governance and operation of schools.
https://purdue.curriculog.com/proposal:17611/form

Graduate Council Document 21-49c, **EDU 61300, Equity, Inclusion, & The Culturally Responsive Curriculum** (PFW) Sem. 1 and 2. SS. Online for 8 weeks. Credit 3.

This course studies issues of diversity, inclusion and equity within the context of a pluralistic society and examines the role of district leaders in designing, implementing and monitoring a culturally responsive curriculum that insures equal access and empowers all learners to grow through equitable learning experiences.
https://purdue.curriculog.com/proposal:17612/form

Graduate Council Document 21-49d, **EDU 64000, Instructional Leadership & Learning Systems** (PFW) Sem. 1 and 2. SS. Online for 8 weeks. Credit 3.

This course examines the capacity of district instructional leaders to utilize school improvement data to design and monitor effective learning support systems, including: academic and non-academic student support services, systems for evaluating curriculum, systems to promote digital literacy, assessment systems that contribute to diagnostic best practices, and professional development that promotes reflective practice around PK-12 student learning and achievement.

https://purdue.curriculog.com/proposal:17624/form

Graduate Council Document 21-49e, **EDU 65000, The School Community And External Leadership** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term. Credit 3.

This course examines the communication process in the context of district school leadership, emphasizing two-way communication as a critical system for engaging diverse families and community partners, collaborating and communicating with internal and external audiences, and the utilization of effective channels and tactics to advance district mission, vision, and prioritize shared values and strategy around P-12 student learning and achievement.
https://purdue.curriculog.com/proposal:17625/form

Graduate Council Document 21-49f, **EDU 65500, School District Operations & Management** (PFW) Sem. 1 and 2. SS. Online for 8 weeks. Credit 3.

This course examines operational, financial and human resource management systems, including the utilization of data-based resource planning to monitor and evaluate operational and equitable management systems at the district level, as well as, systems for recruiting, hiring, retaining, and supervising and developing school and district staff.
https://purdue.curriculog.com/proposal:17627/form

Graduate Council Document 21-49g, **EDU 66000, Strategic Leadership In Schools** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term Credit 3.

This course examines district-level processes for setting goals, establishing internal and external strategy, and identifying lagging and leading measures to effectively design, communicate, and, evaluate mission and vision that reflects shared values and priorities associated with a continuous cycle of improvement that drives decision-making related to P-12 student learning and achievement.
https://purdue.curriculog.com/proposal:17628/form

Graduate Council Document 21-49h, **EDU 67000, Ethical Dimensions Of Leadership Within School Culture** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term Credit 3.

This course examines the ethical dimensions of school leadership, including the role of moral agency in grappling with issues of civic virtue, demonstrating the capacity to promote the current and future success and well-being of each student and adult by applying the knowledge, skill and commitment necessary to understand and advocate for ethical decisions and cultivate professional norms within the larger school culture
https://purdue.curriculog.com/proposal:17629/form

Graduate Council Document 21-49i, **EDU 68000, Talent Development And Performance Management In Schools** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term Credit 3.

This course examines educational policies, practices, and trends associated with the human resource system of a school district, emphasizing the role of district leadership in developing

talent and managing the individualized performance of school personnel through a strong system of professional development for school and district staff.
https://purdue.curriculog.com/proposal:17632/form

Graduate Council Document 21-4j, **EDU 69700, Talent Development And Performance Management In Schools** (PFW) Sem. 1 and 2. SS. Lecture 2 times for 360 minutes for 8 weeks. Hybrid course online plus 2 face-to-face Saturday meetings during the 8-week term Credit 3.

This course provides educational leadership candidates with a six-month internship that fulfills the clinical experience requirement associated with the attainment of a district-level school administration license. In this course, candidates demonstrate the application of knowledge and professional skills (articulated in NELP Standards 1-7) through authentic leadership experiences under the guidance of an assigned, highly qualified mentor.
https://purdue.curriculog.com/proposal:17634/form

Graduate Council Document 21-40a, **HONR 59901, Research Mentorship Development Program** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3.

The Research Mentorship Development Program is designed for Purdue based on a nationally recognized curriculum and prepares graduate students or postdocs to mentor undergraduates in research. Effective mentoring of undergraduate researchers requires specific skillsets and approaches. Implementation of these strategies can lead to a productive and mutually beneficial experience for both students and their mentors. The course is designed for graduate students who plan to work with new researchers in their labs or research groups and who plan to enter academia or pursue careers in which they will mentor others in scholarship or research. Graduate students or postdocs selected for the program are matched with honors students who are interested in research. Permission of department required.
https://purdue.curriculog.com/proposal:17201/form

Graduate Council Document 21-35b, **OLS 50701, Quantitative Analysis And Analytics For Leaders** (IUPUI) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Distance. Credit 3.

This course emphasizes the use of statistical analysis in critical decision making. Specifically, the course focuses on selecting data and running appropriate statistical analyses, synthesizing findings based upon the analyses, making decisions based upon the findings, and using multiple modes to present the data, the findings, and recommendation(s) for action.
https://purdue.curriculog.com/proposal:17044/form

Graduate Council Document 21-35a, **OLS 51600, Diversity, Equity, And Inclusion For Organizational Leaders** (IUPUI) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.

This course will assist students in identifying and understanding diversity, equity, and inclusion issues in the workplace. Students will engage with various theories and concepts related to workplace and societal diversity, equity, and inclusion and apply them to organizational settings.
https://purdue.curriculog.com/proposal:16094/form

Graduate Council Document 21-31a, **PUBH 52500, Statistical Methods For Public Health Evaluation** (PWL) Sem. 1. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisite(s): STAT 51200 or equivalent course, introductory statistics course (STAT 503 or PUBH 601).

This course provides an overview of the statistical methods required to evaluate the effectiveness of public health intervention or prevention programs and policies. The course introduces a range of quantitative, qualitative, and mixed methods research designs and the application and tailoring of these designs to evaluations. In addition, we will focus on categorical data analysis methods, which are often necessary for evaluation projects.

This course will meet for one hour each week for students in PUBH-590: Public Health Program and Policy Evaluation. You will collaborate with those students to conduct an evaluation, develop a report with your findings, and present your findings.

The course is intended for graduate students in public health; however, it may be of interest to students in social work, nursing, education, criminal justice, psychology, and other related fields. Permission of department required.
https://purdue.curriculog.com/proposal:16280/form

Graduate Council Document 21-31b, **PUBH 54700, Public Health Program And Policy Evaluation** (PWL) Sem. 1. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisite(s): None. Recommended: PUBH 60600.

This course provides an overview of the methods required to evaluate the effectiveness of public health intervention or prevention programs and policies. The course introduces a range of quantitative, qualitative, and mixed methods research designs, and the process for applying and tailoring these designs to program and policy evaluations. In addition, we will focus on the process of engaging communities and stakeholders in program evaluation efforts.

The course is intended for graduate students in public health; however, it may be of interest to students in social work, nursing, education, criminal justice, psychology, and other related fields. Permission of instructor required.
https://purdue.curriculog.com/proposal:16281/form

Graduate Council Document 21-31b, **PUBH 60800, Culminating Experience** (PWL) Sem. 1 and 2. Meets four times a semester for 3 hours for grant workshop. Rest is independent study and open hours with faculty instructor. Credit 3.

The MPH degree plans of study require a culminating project to be completed in the final semester of study. The student provides evidence of competency mastery by partnering with a public health related agency, identifying a community problem, proposing an evidence-based solution, and developing an evaluation plan. The final product is in the form of a grant proposal. Guidance for proposal development is achieved through completion of a grant-writing workshop and feedback from a faculty advisor. Permission of department required.
https://purdue.curriculog.com/proposal:16282/form

Area Committee B, Engineering, Sciences, and Technology (John A. Springer, chair; jaspring@purdue.edu):

Graduate Council Document 21-10e, C**NIT 54100, Cyberlearning Research And Development** (PWL) Sem.1. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: At least one of the following: EDPS 53300, EDCI 51500, ENE 50300, STAT 50100, or STAT 51100.

This design-based research course explores and applies methodological and theoretical perspectives to the research, design, and evaluation of learning experiences and environments that integrate computational thinking or cyberlearning within a certain STEM discipline. Design-based research seeks to shape and even engineer learning environments and experiences "in the wild." Is a series of approaches with the intent of producing new theories, artifacts, and practices that account for and potentially impact learning and teaching in naturalistic settings. Typically offered Fall.

https://purdue.curriculog.com/proposal:10335/form

Graduate Council Document 21-45a, **ECET 54400, Real-Time and Embedded Systems** (PWL) Sem. 1 and 2. Lecture 2 times per week for 50 minutes. Laboratory 1 time per week for 100 minutes. Credit 3.

Real-time systems are hardware/software systems in which a timely response by a computer to external stimuli is vital to the performance of the system's objectives. This is the study of temporal determinism. Embedded systems are those with special-purpose microcomputers designed into the system for explicit purposes. Examples of such are the computers on your car's engine that control fuel injection, fly-by-wire attitude controls in modern jet aircraft, even the microcontroller inside a cellular phone. In these examples, the computer has a specific, limited task that is part of the functionality of the device and specifying average performance of that computer is insufficient for successful completion of the task at hand. Imagine if the flight controls of a Boeing 787 on final landing approach experienced a "network lag" similar to that which occurs occasionally while you're reading e-mail. If the controls stop responding at a critical time, a horrific crash could occur. Even if the system doesn't freeze up 99.999% of the time, it can still result in disaster. Typically offered Fall Spring.

https://purdue.curriculog.com/proposal:13617/form

Graduate Council Document 21-7k, **ME 50106, Industrial Energy Audit** (IUPUI) Sem. 1 and 2. 1 credit: Clinic 1 time per week for 100 minutes. 2 credits: Clinic2 times per week for 200 minutes. Credit 1 or 2. Prerequisites: Graduate or Undergraduate Senior standing.

Students enrolled in this course will investigate, evaluate, conjecture, formulate and author during their participation in professional energy audits at multiple manufacturing sites. Students earn one credit hour during the fall semester and two credit hours during the spring semester of this two-part course. Permission of instructor required. Typically offered Fall Spring.

https://purdue.curriculog.com/proposal:9600/form

Graduate Council Document 21-7f, **ME 50801, Orthopaedic Tissue Mechanics** (IUPUI) Cross-listed with BME 54500. Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: MATH 17100 and ME 27200 or equivalent (BME 24101).

Orthopaedic tissues, such as bone, cartilage, tendon and ligament, serve functions that are largely mechanical in nature and that are critical for our health. This course is structured around classical topics in mechanics of materials and their applications in biomechanics and musculoskeletal tissues. Primary emphasis will be on the mechanical behavior of tissues, including elastic and failure properties as well as more advanced topics such as anisotropy, nonlinearity, viscoelasticity, poroelasticity, damage and fatigue. Importantly, the theories used to describe these mechanical properties were originally developed for advanced engineering materials such as fiber composites, polymers, elastomers, hydrogels, etc. Thus, while the theories will be presented in the context of biological materials, potential applications are much broader. Tissue microstructure and its importance to the material properties will be covered. Mechanics of whole bones and implants (composite and asymmetric beam theories) and the mechanical function of native and artificial joints (contact mechanics, lubrication and wear) may also be discussed, time permitting. Some homework assignments will emphasize the use of experimental data to develop and test theoretical models via nonlinear curve fitting and optimization using Matlab. Students will receive an introduction to tissue mechanics literature to better understand how the concepts presented in class are used in the research setting.
https://purdue.curriculog.com/proposal:16790/form

Graduate Council Document 21-7d, **ME 53503, Model-Based Systems Engineering** (IUPUI) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: ME 53501.

This course focuses MBSE or Model-Based Systems Engineering (i.e. the model-based version of Systems Engineering) with an emphasis on its intelligent implementation using SysML graphical language for systems representation. The other two pillars for implementing MBSE are also covered: a methodology (OOSEM) and a tool (Cameo Systems Modeler). The coursework incorporates theoretical concepts learned in earlier systems engineering classes and is structured around the Object Modeling Group's SysML which is used in modeling systems. SysML's application to real-life projects and businesses to define, track and visualize various aspects of a system is investigated. Case studies from a variety of disciplines -- including engineering and healthcare – are used as teaching tools. Typically offered Fall Spring Summer.
https://purdue.curriculog.com/proposal:10494/form

Graduate Council Document 21-7e, **ME 53504, Systems Driven Product Development** (IUPUI) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: ME 53501.

Integrated Model-Based Systems Driven Product (and Process) Development, or *SDPD* (Systems Driven Product Development) is a methodology and framework for integrating system behavioral modeling with downstream design and manufacturing practices to plan multi-domain, complex, systems. SDPD is an implementation of MBE (Model-based Engineering) which integrates MBSE (Model-based Systems Engineering) and PLM (Product Lifecycle Management) to create the "Digital Twin" of a product/process and support the digital transformation resulting in the digital enterprise of Industry 4.0 (4^{th} Industrial Revolution). The

course covers key concepts and definitions pertaining to SDPD including MBSE (Model-based Systems Engineering), PLM, Digital Manufacturing, Digital Twin, Digital Thread, Industry 4.0, Interoperability, Traceability, Validation/Verification, Optimization, and Predictive Analytics. State-of-the-art engineering software tools are taught and used by students to design, optimize and verify multi-domain complex products (or systems) following the SDPD methodology. The graduate level project consists of a comprehensive implementation of SDPD methodology in real-life/industry relevant design and optimization of complex (multi-domain) systems. Typically offered Fall Spring Summer.
https://purdue.curriculog.com/proposal:10495/form

Graduate Council Document 21-7g, **ME 55801, Composite Materials For Automotive Applications** (IUPUI) Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): ME 27200 or Graduate standing.

This course focuses on Development of Low-Cost Carbon Fiber for Automotive Applications, Mechanical Properties of Advanced Pore Morphology Foam Composites, Automotive Composite Structures for Crashworthiness, Crashworthiness Analysis of Composite, Hybrid Structures Consisting of Sheet Metal and Fiber Reinforced Plastics for Structural Automotive and Design Solutions to Improve Crash-Box Impact Efficiency for Racing Applications.
https://purdue.curriculog.com/proposal:16530/form

Graduate Council Document 21-7h, **ME 55802, Design And Analysis Of Materials And Structures In Lightweight Vehicles** (IUPUI) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): ME 27200 or Graduate standing.

This course focuses on materials, their properties, processing technology and design and materials selection issues pertinent to designing lightweight vehicles. It will provide first-hand knowledge and experience of working with these advanced materials. It starts with a broad review of the materials scenario and design considerations for lightweight automotive structures. It is then divided into two major parts: materials, and design and manufacturing.
https://purdue.curriculog.com/proposal:16540/form

Graduate Council Document 21-7i, **ME 57101, Probabilistic Engineering Design** (IUPUI) Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): MATH 26100 and ME 27200.

This course presents probabilistic methodologies for engineering design under uncertainty. It is intended for students who are interested in statistical/probabilistic methods for engineering analysis and design. The outcomes of the course are 1) an ability to model uncertainties in engineering applications, 2) an ability to performance basic statistics, risk, and reliability analyses, and 3) an ability to integrate probabilistic design with simulations, optimization, Design for Six Sigma, and Design of Experiments. The course is lecture and project based.
https://purdue.curriculog.com/proposal:16185/form

Graduate Council Document 21-7j, **ME 61201, Continuum Mechanics** (IUPUI) Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): Graduate standing or the permission of the instructor.

This course will cover the formal, consistent and unified mathematical treatment of the mechanics of continuous solids and fluids. Topics covered include the kinematics of deformation, the concept of stress, and the conservation laws for mass, momentum and energy. This is followed by an introduction to constitutive theory with applications to well-established models for viscous fluids and elastic solids. The concepts are illustrated through the solution of tractable initial boundary-value problems.
https://purdue.curriculog.com/proposal:16818/form

Graduate Council Document 21-7L, **ME 65500, Computational Mechanics Of Materials** (IUPUI) Sem. 1 and 2. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: ME 34400. Co-requisite: ME 56900.

Prediction of the mechanical behaviors of engineering materials employing computational methods, at atomistic, discrete, and continuum levels. Continuum and discrete models for material deformation in brittle and ductile materials. Atomistic models for fracture in nanomaterials. Applications to engineering structures on the macro-micro and nanoscale. Typically offered Fall Spring.
https://purdue.curriculog.com/proposal:9241/form

Graduate Council Document 21-34a, **TCM 56000, Technical And Scientific Communication In Academic Contexts** (IUPUI) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.

Develop reading, writing, and speaking skills for academic success as an engineering, science, or technology graduate student. Students analyze the structure, claims, and evidence of written documents and oral presentations. Students simulate these presentations and write similar documents to gain practical experience for successful writing and speaking in academic contexts. Typically offered Fall Spring Summer.
https://purdue.curriculog.com/proposal:14791/form

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

Graduate Council Document 21-43a, **COM 65100, Organizational Culture And Internal Communication** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

The modern workplace had transformed well before a global pandemic magnified the paradigm shift already under way. In the United States, both consumers and the first five-generation workforce began to demand more from brand statements and value propositions. Those demands include genuine commitment to inclusion and diversity internally and corporate social responsibility externally. This course highlights the vital role professional communicators have in conveying brand and value statements that emanate from the organization's cultural core and carry forward to the consumer universe.
https://purdue.curriculog.com/proposal:17263/form

Graduate Council Document 21-43b, **COM 65200, Communication Education And Training** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

This course is designed to introduce fundamental concepts related to learning theory and learning design as applied to training and educational settings. The course will examine best practices and strategies with a focus on assessing and enhancing communication-related skills.
https://purdue.curriculog.com/proposal:17278/form

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

Graduate Council Document 21-3g, **BIOL 66201, Professional Development** (PFW) Sem. 1. Lecture 1 time per week for 50 minutes. Credit 1.

An introduction for incoming graduate students to methods of seminar presentation and critique and to various guidelines for professional development during their graduate school experience. Topics include research laboratory safety (REM), how to give a talk, acclimating to graduate studies (especially time management), how to select a major professor and an advisory committee, how to prepare a thesis proposal, Purdue University guidelines for responsible conduct of research, how to organize a poster presentation, how to negotiate with mentors, and expectations for success. The course also serves to socialize the incoming cohort of students among themselves and with more senior students in the broad range of research disciplines available.
https://purdue.curriculog.com/proposal:17319/form

Graduate Council Document 21-30a, **NUR 62501, DNP Role In Knowledge Translation Within Healthcare Delivery Systems** (PNW) Sem. 1 and 2. SS. Distance. Credit 3.

This course broadens and refines the student's understanding of the DNP role as a practice doctorate within the healthcare delivery system. The DNP role is examined through the ANCC Essentials for DNP Education. Focus areas for this class include the DNP role in Evidence Based Practice, collaboration, organizational leadership, systems thinking, quality improvement, and change. The student will explore the transformation of the role of health care providers and consumers related to economic, social, organizational, political, ethical, legal, and technological perspectives. Typically offered Fall Spring Summer.
https://purdue.curriculog.com/proposal:16760/form

Graduate Council Document 21-30c, **NUR 62601, Applied Biostatistics For Outcome Evaluation** (PNW) Sem. 1 and 2. SS. Lecture 1 time per week for 100 minutes. Distance.

Credit 3.

In this course, students will learn to interpret biostatistics commonly used in nursing and health services research. This course covers important concepts and techniques for understanding

and interpreting statistical results and evaluating health outcomes. The focus of this course will be when to use a given method and how to interpret the results, not the actual computation or computer programming to obtain results from raw data. This course will involve minimal calculation and offer no formal training in any statistical software. Students will examine, translate and critically analyze biostatistics through the fundamental concepts of:

- study design,
- descriptive statistics,
- hypothesis testing,
- confidence intervals,
- odds ratios,
- relative risks,
- multiple linear, logistic and proportional hazards regression,
- power analysis, and
- survival analysis.

https://purdue.curriculog.com/proposal:17485/form

Graduate Council Document 21-30d, **NUR 64101, Principles Of Epidemiology** (PNW) Sem. 1 and 2. SS. Distance. Credit 3.

This course will introduce students to basic application of epidemiologic methods and procedures to the study of population health, including the distribution and determinants of health and diseases, morbidity, injuries, disability, and mortality. Epidemiologic methods for the control of conditions such as infectious and chronic diseases, mental disorders, community and environmental health hazards, and unintentional injuries are discussed. Other topics include quantitative aspects of epidemiology, study design, and screening for disease. The goal of the course is to enable students to become informed and intelligent consumers of epidemiologic literature and to apply and translate epidemiological principles in health communication.
https://purdue.curriculog.com/proposal:17530/form

Graduate Council Document 21-30b, **NUR 67801, Health Economics And Finance** (PNW) Sem. 1 and 2. SS. Distance. Credit 3.

This class will provide an introduction to the application of health economic principles as they relate to various healthcare systems, healthcare stakeholders, and health policy issues in the United States. The course will explore the allocation and distribution of resources in the healthcare industry and the nature of the constantly changing relationships between health care and its major constituencies to enhance population health. Topics include the demand for health care, access to care; healthcare parity; healthcare reimbursement; economic evaluation and economic evaluation models; interprofessional healthcare delivery models; and health care professionals' services. Typically offered Fall Spring Summer.
https://purdue.curriculog.com/proposal:16758/form

Graduate Council Document 21-29a, **NUTR 51100, Applied Nutrition Counseling** (PWL) Sem. 1. First 4 weeks: Lecture 2 times per week for 50 minutes. Laboratory 1 time per week for 110 minutes. Last 12 weeks: Lecture 1 time per week for 110 minutes. Clinic (each student meeting with their client 1time per week plus de-brief with instructor after each client meeting; space used will be consultation rooms in LYLE rooms 1146 and 1148). Credit 3.

Prerequisite(s): NUTR 33200, minimum grade of C and NUTR, minimum grade of C

Field experience in one-on-one nutrition counseling that requires application of prior learning of theory, knowledge and skills.

https://purdue.curriculog.com/proposal:16793/form

Graduate Council Document 21-29c, **NUTR 51200, Dietary Supplements** (PWL) Sem. 1. First 4 weeks: Lecture 2 times per week for 50 minutes. Credit 2.

Provides advanced training to evaluate concepts and issues of dietary supplement use in various populations. Students develop critical thinking skills through activities such as case studies to make appropriate recommendations for nutrition supplementation.

https://purdue.curriculog.com/proposal:16668/form

Graduate Council Document 21-29d, **NUTR 51300, Food Chemistry** (PWL) Sem. 1. First 4 weeks: Lecture 2 times per week for 50 minutes. Credit 2. Prerequisite(s): CHM 25600 Minimum Grade of D- or CHM 26200 Minimum Grade of D- or Undergraduate level or

CHM C3420 Minimum Grade of D- or CHM 25700 Minimum Grade of D-.

Application of fundamental laws and concepts of chemistry, physics, and biology to foods and the sensory and analytical properties of food. Evaluation of the validity of health controversies related to food ingredients. Completion of a food additive assessment.

https://purdue.curriculog.com/proposal:16621/form

Graduate Council Document 21-29m, **NUTR 52100, Advanced Medical Nutrition Therapy** (PWL) Sem. 2. Lecture 2 times per week for 50 minutes per meeting. Laboratory 1 meeting per week for 170 minutes. Credit 3. Prerequisites: NUTR 48000, minimum Grade of C.

Application of the Nutrition Care Process in various disease states and conditions to prepare students for supervised practice. Prerequisite course for NUTR 56100 Experiential Learning in Medical Nutrition Therapy.

https://purdue.curriculog.com/proposal:16576/form

Graduate Council Document 21-29e, **NUTR 52200, Advanced Nutrition Communications** (PWL) Sem. 2. Lecture 2 times per week for 75 minutes. Credit 3.

Provides advanced training and skill development to effectively implement and evaluate food and nutrition communication to lay and professional audiences through oral, written, and mass media channels. Permission of department required.

https://purdue.curriculog.com/proposal:17305/form

Graduate Council Document 21-29f, **NUTR 52300, Trends In Nutrition & Dietetics** (PWL) Sem. 2. Lecture 1 time per week for 110 minutes. Credit 2.

Analysis and discussion of current trends in dietetics practice and nutrition including such topics as nutrigenomics, informatics, sustainability, agricultural practices, food policies, and global health.

https://purdue.curriculog.com/proposal:17068/form

Graduate Council Document 21-29h, **NUTR 53100, Ethical Practice And Professionalism In Dietetics** (PWL) Sem. 1. Lecture 1 time per week for 50 minutes. Credit 1.

Evaluation of concepts and issues of ethical practice in the dietetics profession and the application of the Scope/ Standards of Practice for Nutrition and Dietetics Practitioners and the Code of Ethics for the Nutrition and Dietetics Profession. Permission of department required.

https://purdue.curriculog.com/proposal:16815/form

Graduate Council Document 21-29g, **NUTR 53300, Community Nutrition Experience** (PWL) Sem. 1. Clinic and Recitation. CLN/11,520minutes (32hours) per week/6 weeks in supervised practice and REC/60 minutes per week/6 weeks. Credit 3.

Application of previous knowledge and communication skills in nutrition of community settings, such as school nutrition, health facilities, and federal or state nutrition programs.

https://purdue.curriculog.com/proposal:16575/form

Graduate Council Document 21-29i, **NUTR 53900, Foodservice Systems Management Experience (**PWL) Clinic/19,200 minutes (32 hours) per week/ 10 weeks in supervised practice plus 1 hour Recitation per week. Credit 4. Prerequisites: NUTR 45400 and NUTR 55300 and NUTR 53300 and ServSafe Certification (manager level).

Application of previous knowledge and communication skills in foodservice facilities. Student's performance will ultimately include responsibilities equivalent to staff relief.

https://purdue.curriculog.com/proposal:16194/form

Graduate Council Document 21-29L, **NUTR 54200, Engagement Experience** (PWL) Sem. 2. Clinic/11,520 minutes (32 hours) per week/6 weeks in supervised practice AND Recitation/60 minutes per meeting/6 weeks. Credit 3. Prerequisites: NUTR 53300 and NUTR 53900 and NUTR 54300.

Application of previously acquired knowledge and communication skills in a culminating supervised practice experience in one of seven engagement tracks. Placements at professional sites incorporate individual student's preferred track in foodservice, industry, nutrition-fitness-wellness-energy balance, community/public health, long-term care, medical nutrition therapy or research. Students complete a major project demonstrating readiness to practice as an entry-level dietitian.

https://purdue.curriculog.com/proposal:16477/form

Graduate Council Document 21-29k, **NUTR 54300, Medical Nutrition Therapy Experience** (PWL) Sem. 2. Clinic/19,200 minutes (32 hours) per week/10 weeks in supervised practice AND Recitation/60min per meeting/1 meeting g per week/10 weeks. Credit 4. Prerequisites: NUTR 58100, minimum grade C and NUTR 51100, minimum grade C and NUTR 53300 and NUTR 53900.

Application of previous knowledge and communication skills of medical nutrition therapy in the hospital/ patient care setting to ultimately include responsibilities equivalent to staff relief.

https://purdue.curriculog.com/proposal:16197/form

Graduate Council Document 21-29j, **NUTR 54400, Advanced Medical Nutrition Therapy For Special Populations** (PWL) Sem. 2. Lecture 1 time per week for 50 minutes for 12 weeks. Laboratory 1 time per week for 120 minutes for 4 weeks (lab will be used for enhanced skill competency assessment). Credit 1.

Application of Medical Nutrition Therapy for special populations including enhanced skills for the practice of dietetics. Lectures and laboratory activities supplement training in various diagnoses and conditions not routinely encountered during supervised practice experiences in NUTR 54300 Medical Nutrition Therapy Experience.

https://purdue.curriculog.com/proposal:17077/form

Area Committee F, Management Sciences (TBD):

Graduate Council Document 21-41a, **ECON 50000, Mathematics For Economists** (PWL) Sem. 1 and 2. SS. Distance. Credit 2 to 3.

This is a Master's level course in mathematics and its application to economics. Students in this class will review and practice the mathematical methods required to solve micro and macroeconomic theoretical models, especially constrained optimization problems. Content covers algebra, univariate and multivariate calculus and constrained optimization methods.

https://purdue.curriculog.com/proposal:17103/form

Graduate Council Document 21-41b, **ECON 50100, Statistical Analysis For Economists** (PWL) Sem. 1 and 2. Distance. Credit 2 or 3.

A master's level course in statistics and its application to economics. Course will familiarize students with the elements of statistics needed to perform econometrics.
https://purdue.curriculog.com/proposal:17100/form

Graduate Council Document 21-41e, **ECON 57600, Statistical & Machine Learning** (PWL) Sem. 1 and 2. SS. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Online. Credit 2 or 3.

This is an introductory course in statistical and machine learning. It will cover fundamental concepts and essential tools that are critical in understanding cutting-edge machine learning techniques. Students will develop skills in applying a wide variety of modeling and prediction methods. Topics include linear regression, classification, regularization and shrinkage methods, tree-based methods, and support vector machines. An integral part of this course is the extensive use of the open source statistical software R. Students will gain hands-on experience in analyzing datasets commonly used in business and economics.
https://purdue.curriculog.com/proposal:17091/form

Graduate Council Document 21-41f, **ECON 57700, Quantitative Economics With Python** (PWL) Sem. 2. Distance. Credit 2 or 3.

Introduce students to computational and programming in Python.
https://purdue.curriculog.com/proposal:17149/form

Graduate Council Document 21-41h, **ECON 59100, Financial Valuation And Decision Making** (PWL) Sem. 1 and 2. SS. Distance. Credit 2 or 3.

A comprehensive introduction to finance. The object of this course is to provide the computational framework necessary to appreciate and understand how to make decisions based on sound financial reasoning.
https://purdue.curriculog.com/proposal:17098/form

Graduate Council Document 21-41k, **ECON 64200, Computational Economics** (PWL) Sem. 1 and 2. SS. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3.

The purpose of this class is to give you a computational toolbox you can apply to economic questions. We will introduce and use numerical methods on computationally tractable problems. The goal of the course is to encourage Ph.D. students to apply these techniques to their own research. Our in-class applications
will primarily be public policy and macro-oriented, by solving and simulating the problems of microeconomic agents and aggregating the results.
https://purdue.curriculog.com/proposal:17131/form

Graduate Council Document 21-41L, **ECON 65300, Topics In Early Childhood Development** (PWL) Sem. 1 and 2. SS. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3.

This course is the second in the Ph.D. Labor Economics sequence. We will focus on the economics of skill formation and its consequences on later outcomes like schooling choices, health, social behaviors and labor market variables. We will do this, by analyzing both static and dynamic settings, in which we recognize that skill formation is a process where early inputs affect the productivity of later ones. This course will be econometrically intense, covering from reduced form techniques to structural ones. We will pay special attention to econometric identification of effects and the analysis of skills as unobserved heterogeneity, its consequences on empirical estimation and models to address it. This course will emphasize the connection between theory and practice.

https://purdue.curriculog.com/proposal:17141/form

Graduate Council Document 21-41n, **ECON 65500, Public Economics** (PWL) Sem. 1 and 2. SS. Distance. Credit 2 to 3. Prerequisite(s): ECON 65000.

Knowledge of various types of government programs, public policies and program administration.

https://purdue.curriculog.com/proposal:17145/form

Graduate Council Document 21-41o, **ECON 65600, Labor Economics II** (PWL) Sem. 2. Distance. Credit 3.

This course is the third in the PhD Labor Economics sequence. This course is designed to be primarily a "topics" course. Class will focus on some of the most popular open questions in labor economics; however, we will take a long view to these questions in order to understand the progress that has been made over the last half century.

https://purdue.curriculog.com/proposal:17143/form

Graduate Council Document 21-41p, **ECON 66200, Game Theory** (PWL) Sem. 1 and 2. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3.

In this course, we will examine some of the basic elements of Game Theory. Game Theory studies strategic environments in which each individual's payoff depends upon both their own actions as well as the actions of others. Game Theory attempts to develop an understanding of such situations and to provide a formal framework and solution concepts for making better strategic choices.

https://purdue.curriculog.com/proposal:17324/form

Graduate Council Document 21-41q, **ECON 67800, Search Theory And Applications** (PWL) Sem. 1 and 2. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3.

This course provides an overview to the tools and applications of search theory, which has been a very active area of research. The aim of this course is to provide students with a solid understanding of the search approach and to get started on engaging in research.
https://purdue.curriculog.com/proposal:17147/form

Graduate Council Document 21-41s, **ECON 69200, Advanced Topics In Time Series** (PWL) Sem. 1 and 2. SS. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3. Prerequisites: ECON 67000 and ECON 67100 and
ECON 67200 and ECON 67300.

This course covers a set of selected topics of current interest in economic forecasting. It is designed for students interested in conducting theoretical research related to the development and evaluation of new forecasting techniques as well as those inclined towards the application of state-of-the-art techniques to economic data.
https://purdue.curriculog.com/proposal:17127/form

Graduate Council Document 21-41t, **ECON 69300, Bayesian Econometrics I** (PWL) Sem. 1 and 2. SS. Credit 3: Lecture 2 times per week for 75 minutes. Credit 2: Lecture 2 times per week for 50 minutes. Distance. Credit 2 or 3. Prerequisites: ECON 67100 or equivalent.
This is a first course in Bayesian Econometrics. The overarching goal of the course is to expose students to the Bayesian perspective and get them up-to-speed with modern Bayesian simulation methods.
https://purdue.curriculog.com/proposal:17125/form

DEGREE(S):

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

Graduate Council Document 21-39a, New Degree in Educational Specialist, submitted by the Department of Education, PFW
https://purdue.curriculog.com/proposal:17202/form

Area Committee B, Engineering, Sciences, and Technology (John A. Springer, chair; jaspring@purdue.edu):

Graduate Council Document 21-53a, Ph.D. in Computer and Information Technology, submitted by the Department of Computer and Information Technology, PWL
https://purdue.curriculog.com/proposal:16667/form

MAJOR(S):

Area Committee C: Chemistry, Engineering, and Physical Sciences, Margaret Gitau; chair, mgitau@purdue.edu):

Graduate Council Document 21-47a, Graduate Major in Applied Geospatial Data Analytics and Strategic Communications, submitted by the Graduate School Administration, PWL
https://purdue.curriculog.com/proposal:17464/form

NEW DOCUMENTS RECEIVED

(After the October 21, 2021 Graduate Council Meeting)

GRADUATE COURSE PROPOSALS:

Area Committee B, Engineering, Sciences, and Technology (John A. Springer, chair; jaspring@purdue.edu):

Graduate Council Document 21-42h, **ECE 50024, Machine Learning** (PWL) Lecture 3 times per week for 50 minutes. Credit 3. Prerequisite(s): ECE 20875 and ECE30200 or equivalent courses.

An introductory course to machine learning, with a focus on supervised learning using linear models. The course will have four parts: (1) mathematical background on linear algebra, probability, and optimization. (2) classification methods including Bayesian decision, linear regression, logistic, regression, and support vector machine. (3) robustness of classifier and adversarial examples. (4) learning theory on the feasibility of learning, VC dimension, complexity analysis, bias-variance analysis. Suitable for senior undergraduates and graduates with a background in probability, linear algebra, and programming.
https://purdue.curriculog.com/proposal:17476/form

Graduate Council Document 21-42i, **ECE 50631, Fundamentals Of Current Flow** (PWL) Lecture 3 times per week for 50 minutes for 5 weeks. Credit 1.

Traditional description of electronic motion through a solid is based on diffusive transport which means that the electron takes a random walk from the source to the drain. However, modern nanoelectronic devices often have channel lengths comparable to a mean free path so that electrons travel ballistically, or "like a bullet." This course provides a unified conceptual framework for ballistic and diffusive transport of both electrons and phonons, that is very different from what is taught in standard courses, but indispensable to understanding nanolectronic devices.
https://purdue.curriculog.com/proposal:17364/form

Graduate Council Document 21-42j, **ECE 50632, Introduction To Quantum Transport** (PWL) Lecture 3 times per week for 50 minutes for 5 weeks. Credit 1.

This course introduces the Schrödinger equation, uses the tight-binding method to discuss the concept of bandstructure and E(k) relations, along with simple quantum transport problems. No prior background in quantum mechanics or statistical mechanics is assumed.
https://purdue.curriculog.com/proposal:17366/form

Graduate Council Document 21-42k, **ECE 50633, Boltzmann Law: Physics To Computing** (PWL) Lecture 3 times per week for 50 minutes for 5 weeks. Credit 1.

This course introduces the key concepts of equilibrium statistical mechanics leading to the celebrated Boltzmann law and how it leads to Boltzmann machines and related concepts in modern machine learning. No prior background in statistical mechanics is assumed.
https://purdue.curriculog.com/proposal:17367/form

Graduate Council Document 21-42L, **ECE 51220, Applied Algorithms** (PWL) Lecture 3 times per week for 50 minutes. Credit 3. Prerequisite(s): ECE 36800 or equivalent.

Solving large-scale problems typically rely on many clever data structures and algorithms. This course aims to cover many such useful algorithms for solving large-scale problems. These algorithms include greedy algorithms, dynamic programming and more advanced graph algorithms. The course also aims to demonstrate how such algorithms can be applied to solve optimization problems encountered in engineering applications. In particular, applications in the design of VLSI (very large scale integration) at circuit, layout, or system level will be used to demonstrate how an engineering problem can be formulated as a tree/graph problem and solved using established tree/graph algorithms.
https://purdue.curriculog.com/proposal:17368/form

Graduate Council Document 21-42m, **ECE 60827, Programmable Accelerator Architectures** (PWL) Lecture 3 times per week for 50 minutes. Credit 3. Prerequisite(s): ECE 43700 or equivalent and ECE 56500

Programmable hardware accelerators seek to fulfill the promise of continued performance and energy-efficiency gains in the era of a slowing Moore's law, larger problem sizes and an increased focused on energy-efficiency. These factors have caused hardware acceleration to become ubiquitous in today's computing world and critically important in computing's future. This class will introduce students to the architectures of programmable accelerators. We will delve deeply into the architectures of modern massively parallel accelerators like GPUs, culminating in a course project. General topics in hardware acceleration will be discussed, including but not limited to GPGPU and massively parallel computing, approximate accelerators, reconfigurable hardware and programmable hardware for machine learning.
https://purdue.curriculog.com/proposal:17318/form

Graduate Council Document 21-42n, **ECE 61010, Time Domain Simulation And Optimization For Design** (PWL) Lecture 3 times per week for 50 minutes for 5 weeks. Credit 1.

This is a skills course that teaches time domain simulation and multi-objective design optimization. This course will serve the needs of students in power and energy system and component design, but is widely applicable to all areas of engineering and does not require domain specific knowledge.
https://purdue.curriculog.com/proposal:17472/form

Graduate Council Document 21-, **MSE 51800, Failure Analysis** (PWL) Lecture 3 times per week for 50 minutes OR Lecture 2 times per week for 75 minutes OR Distance. Credit 3. Prerequisite(s): Graduate standing or (MSE 33500 and MSE 38200).

Introduction to failure analysis and prevention. Concepts of materials failure, root cause analysis, manufacturing aspects of failure, techniques for identifying failure, fracture, corrosion, wear, and case studies. Also includes business and entrepreneurship aspects.
https://purdue.curriculog.com/proposal:17909/form

Area Committee C: Chemistry, Engineering, and Physical Sciences, Margaret Gitau; chair, mgitau@purdue.edu):

Graduate Council Document 21-58a, **CHM 69699, Chemistry Graduate Internship** (PWL) Experiential. Credit 0.

Graduate internship experience. Students submit final work report and company evaluation. Permission of instructor required.
https://purdue.curriculog.com/proposal:18250/form

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

Graduate Council Document 21-43c, **COM 50300, Cross Cultural Communication** (PWL) Lecture 3 times per week for 50 minutes or 2 times per week for 75 minutes or 1 time per week for 150 minutes. Distance 16 week term or 8 week term. Credit 3.

In this course, we examine the scholarly history of intercultural and cross-cultural communication along with conceptual and empirical challenges in doing this type of inquiry. Several contexts will be studied from the point of view of forms of cultural wisdom and variation in practices. Larger questions of idenity, diversity, and intercultural competence will be explored, especially through filters of globalization and ethical issues in intercultural relations. Students will have regular reading assignments, short reaction papers, give oral presentations, and write a final research paper or proposal, depending on their stage in their programs.
https://purdue.curriculog.com/proposal:17897/form

Graduate Council Document 21-56a, **ENGL 56602, Project Management For Writers** (PFW) Lecture 2 times per week for 75 minutes. Distance. Credit 3. Prerequisite(s): Graduate level.

Project management education smartly focuses a great deal on planning and organization, process documentation, and management implementation strategies. However, building effective communication strategies and abilities is often overlooked and incorrectly thought of as a soft skill. In this class, we are going to specifically address the intricacies of communicating effectively in the workplace as an essential skill of project managers. In addition, we will also discuss planning and organizing strategies and models, process documentation, and management implementation strategies and philosophies. We'll learn about these concepts through hands-on project work that emphasizes individual and collective approaches to project management and gives us a basis for thinking through issues that influence the workplace—from emerging workspace design to the effects of globalization on distributed teams and organizations. Students should leave class with skills and knowledge that they can refer to when asked to lead and participate in a variety of projects in different organizational contexts. Permission of instructor required.
https://purdue.curriculog.com/proposal:17915/form

CERTIFICATE(S):

Area Committee C: Chemistry, Engineering, and Physical Sciences, Margaret Gitau; chair, mgitau@purdue.edu):

Graduate Council Document 21-57a, Graduate Certificate in Regulatory Affairs and Regulatory Science for Medical Devices School of Biomedical Engineering, PWL