

PURDUE UNIVERSITY GRADUATE SCHOOL

Minutes of the Graduate Council Meeting
February 17, 2022
2:30 p.m.

Fifth Meeting
Via Zoom

PRESENT: James L. Mohler, Deputy Chair, Council Members, Raida Abuizam, Christopher R. Agnew, Kola Ajuwon, Yong Bao, Janice S. Blum, Steven J. Burdick, David S. Cochran, Joy Colwell, G. Jonathan Day, Eric D. Deemer, Bryan DeWitt, Emad Elwakil, Keith B. Gehres, Margaret Gitau, Catherine A. Golden (Provost's Representative), Jeffrey P. Greeley, Chong Gu, Randolph D. Hubach, Troy D. Janes, Ann L. Kirchmaier, Douglas J. LaCount, Timothy B. Lescun, Jiliang Li, Yanjun Li, Madelina Nuñez, Tina L. Payne, Paul Salama, Megan Sapp Nelson, Abraham Schwab, Ann Shanahan, Michael G. Smith, John A. Springer, Joseph D. Thomas, Eric Waltenburg, Chenn Zhou

APOLOGIES FOR ABSENCE RECEIVED FROM: Linda J. Mason, chair, Thomas W. Atkinson, Christopher K. Belous, Levon Esters, Kevin D. Gibson, Melanie Morgan, Jill J. Suitor

ABSENCES: Suzanne C. Bart, Erla Heyns, Tong Jin Kim, Judith Lewandowski, Zhan Pang, Christine Wuenschel

GUESTS: Debbie Fellure, Horia Petrache, Kihong Park, Keith Stantz, Sharry Vahed, Korena Vawter

I. MINUTES

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

II. DEANS REMARKS AND REPORTS

Deputy Chair James Mohler

- Welcomed Catherine Golden, Assistant Vice Provost for Academic Initiatives in the Office of the Provost who replaced Candiss Vibbert. Catherine will be speaking to the Graduate Council next month.
- Approximately 2,000 units have checked the box for research deliverables with only 300 units outstanding.
- Graduate coordinators being assigned as proxies, has helped significantly.

- Graduate Council members were asked to relay this to their units thanking them for their assistance in getting the box checked for research deliverables.
- Most important is having an agreement about the deliverables for graduate students that conversations are occurring and there is something on record as far as expectations for research.
- Some syllabi coming through with new course proposals are significantly lacking.
- The syllabi that we are seeing should be no different than the level of detail than what we would see in an undergraduate course.
- If a syllabus is coming through with no learning objectives or without a layout of topics that will be discussed, it is problematic.
- The Center for Instructional Excellence provides a course template; however, not everything in the template applies at the graduate level.
- Some of the basic things on the syllabus are also required on the Curriculog course proposals.
- It has been noted that the Center for Instructional Excellence (CIE) template is almost contractual in its nature. Should we create a checklist of the items that must be on a syllabus for new graduate course proposals that does not include all of the contractual items on the template and update the checklist annually or should we have a checklist with all of the things that are required on the CIE template.
- Each semester the Provost Office sends a model syllabus template that includes sections that are required and optional for the undergrad syllabi. Should we take the undergrad syllabus template and include the required language in the graduate syllabi?
- Regional campuses may have different emergency procedures or DI statements than West Lafayette that may support not having that level of detail.
- Task Force committee will be set up to define what is the most important information required in the evaluation of new graduate proposals. Would the best way be with the syllabus attached or in the actual Curriculog document? This is important for the Area Committees in the review process what is decided.
- Dean Mason is in discussions with the Provost regarding graduate fees, remission, funding and salaries. With these discussions, graduate students would benefit by improving the experience in graduate education at Purdue University and help in recruiting.
- Dean Mason will be presenting to the Board of Trustees in March on the updates of graduate endeavors.
- JoAnn Brouillette will be the speaker at the April Graduate Council meeting. The meeting will be held in Pfindler Hall, 241.

III. AREA COMMITTEE REPORTS (Area Committee Chairs)

Graduate Council Document 22B, Graduate Council Documents Recommended for Approval. See Appendix B. Voted via Qualtrics survey.

IV. PURDUE GRADUATE STUDENT GOVERNMENT -- PRESIDENT'S REPORT

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

- PGSG Statement on Police Violence and Accountability
 - Support and collaboration with BSU.
 - Continued advocacy for Purdue to have confidential, advocacy support for racial, ethnic, and xenophobic discrimination.
- Graduate student raises
- Hosted over 50 events in Fall 2021
- Awarded over \$100,000 in grants to graduate students in Fall 2021
- PGSG & PSG Immigration Attorney Initiative began in Spring 2020 with the intent to provide students with free access to an immigration attorney
- Establish PGSG Emergency Needs Grant that is a new grant that looks to assist graduate students in crisis
- PGSG Speaker Series
 - Fall 2021 - Dr. Ronni Sanlo in partnership with LGBTQ+ Center
 - Spring 2022 - TBA
- Opened ACE Pop Up Pantry at Purdue Student Center
 - Free food available weekly with student ID
- PGSG Website and Branding overhaul
- Created PGSG Informational Video
- PGSG Ad hoc Committees 2021-2022
 - Equity and Diversity
 - Sexual Violence & Graduate Students

V. OLD BUSINESS

- a) Dr. James Mohler presented GC Doc 21-H, Purdue University Authorship Standard. Document will be endorsed by Council via the February Qualtrics Survey. See Appendix C
- b) Dr. James Mohler presented GC Doc 21-L, Guidelines for Stackable Certificates. Document will be voted on by the Senate via the February Qualtrics Survey. See Appendix D.

The council meeting was adjourned by James Mohler at 3:15 p.m.

James Mohler, Deputy Chair
Tina L. Payne, Secretary

APPENDIX A

PENDING DOCUMENTS

(February 2022)

BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

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

Graduate Council Document 21-1k, EDPS 55800, Transition Education And Services (PWL) Distance.

Credit 3.

Graduate Council Document 22-1a, PUBH 52000, Human Sexuality And Sexual Health (PWL)

Graduate Council Document 22-1b, PUBH 54600, Child And Family Health Policy (PWL)

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

Graduate Council Document 21-26b, CS 57100, Artificial Intelligence (PWL)

Graduate Council Document 21-42o, ECE 51800, Digital Image Processing (PFW)

Graduate Council Document 21-42p, ECE 60146, Deep Learning - Theory And Practice Of Deep Neural Networks (PWL)

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

Graduate Council Document 22-2a, BME 51500, Practical MRI and Applications (PWL)

Graduate Council Document 21-60a, EAPS 50600, Cosmochemistry And Geochemistry (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 21-56a, ENGL 56602, Project Management For Writers (PFW)

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

Graduate Council Document 21-61a, ANSC 51600, Molecular Microbiome Analysis (PWL)

Graduate Council Document 21-28c, FNR 57400, Big Data, AI, And Forests (PWL)

Area Committee F, Management Sciences (TBD):

Graduate Council Document 21-62a, TDM 51100, Corporate Partners (PWL)

DEGREE(S):

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

Graduate Council Document 22-3a, MS in Dietetics for the Department of Nutrition Science (PWL)

APPENDIX B

GC Document 22-B

DOCUMENTS RECOMMENDED FOR APPROVAL BY THE GRADUATE COUNCIL FEBRUARY 2022

GRADUATE COURSE PROPOSALS:

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

Graduate Council Document 21-1k, EDPS 55800, Transition Education And Services (PWL)
Distance. Credit 3.

This course will explore a variety of resources, strategies, and techniques for promoting successful life transitions for students with mild and intense intervention needs before and throughout the school years and into postsecondary and adult settings.

<https://purdue.curriculog.com/proposal:18190/form>

Graduate Council Document 22-1a, PUBH 52000, Human Sexuality And Sexual Health (PWL)
Lecture 1 meeting per week for 150 minutes. Credit 3.

This course is designed to provide students with an in-depth and applied understanding of the major theories and principles guiding human sexuality and sexual health research. Content covered will enrich an understanding of sexuality and sexual health research methods, past and present research findings, and the intersection of this field and public health practice.

<https://purdue.curriculog.com/proposal:17972/form>

Graduate Council Document 22-1b, PUBH 54600, Child And Family Health Policy (PWL)
Lecture 1 meeting per week for 150 minutes. Credit 3.

The main goals of the course are to provide students with foundational knowledge related to research and policies that affect the health and wellbeing of children and families. Students will read and discuss policy-relevant research on current topics associated with child and family health. Students will read and discuss examples of researchers who have made an impact on child and family policies. Students will also write three papers that integrate research and policy perspectives.

<https://purdue.curriculog.com/proposal:17977/form>

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

Graduate Council Document 21-26b, CS 57100, Artificial Intelligence (PWL) Lecture 1 time per week for 150 minutes or 2 times per week for 75 minutes or 3 times per week for 50 minutes. Credit 3. Prerequisites: Graduate standing or C or better in CS 38100 and (STAT 35000 or 35500) and (MA 26500 or MA 35100).

Artificial Intelligence (AI) systems are increasingly being deployed in many real-world tasks. This course provides an introduction to the fundamental principles and applications of AI. The course covers classic material including search-based methods, probabilistic reasoning, game playing, decision making, exact and approximate inference, causal learning, and reinforcement learning as well as selected advanced topics. The focus of the course is on foundational methods and current techniques for building AI systems that exhibit ‘intelligent’ behavior and can ‘learn’ from experience. The course assumes students are familiar with basic concepts in analysis, linear algebra, optimization, discrete mathematics, elementary probability, statistics, data structures, and algorithms. Students are expected to have good programming and software development skills and have a working knowledge of Python and Java.

<https://purdue.curriculog.com/proposal:18707/form>

Graduate Council Document 21-42o, ECE 51800, Digital Image Processing (PFW) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: ECE 22900 or equivalent. Co-Requisites: ECE 30100.

This course introduces the fundamentals of digital image processing from both theory and application perspectives. It covers digital image fundamentals, image transformation, image enhancement in spatial and frequency domains, image restoration and reconstruction, image segmentation, and advanced topics in digital image processing including deep learning for image classification, object recognition, and semantic/instance segmentation.

<https://purdue.curriculog.com/proposal:17807/form>

Graduate Council Document 21-42p, ECE 60146, Deep Learning - Theory And Practice Of Deep Neural Networks (PWL) Lecture 2 times per week for 75 minutes. Credit 3.

This course teaches the theory and practice of deep neural networks from basic principles through state-of-the-art methods. The class blends hands-on programming, using a variety of state-of-the-art programming frameworks, with theoretical treatment based on current literature. Implementation will emphasize the use of the Pytorch language and the use of dynamic computational graphs. Some previous experience with optimization techniques is important for success in the course.

<https://purdue.curriculog.com/proposal:18102/form>

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

Graduate Council Document 22-2a, BME 51500, Practical MRI and Applications (PWL)
Lab Prep 1 time per week for 50 minutes for 8 weeks and Laboratory 1 time per week for 100 minutes for 8 weeks. Credit 1.

This course covers basic theory and practical training for magnetic resonance imaging (MRI). Weekly labs allow students to directly train on an MRI system within the Purdue MRI Facility. Weekly lectures are provided on a broad range of applied and relevant topics, including image formation and contrast, pulse sequence basics, artifacts, advanced sequences, and safety. The course is ideally designed for students who want to make use of MRI to advance their research.

<https://purdue.curriculog.com/proposal:19324/form>

Graduate Council Document 21-60a, EAPS 50600, Cosmochemistry And Geochemistry (PWL)
Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: Student Attribute: GR or EAPS 24300.

The course focuses on the chemical processes involved in the formation and evolution of our solar system and our planet. The course includes discussion of nucleosynthesis and chemical abundances, the origin and composition of various planetary objects and their constituent materials, and the distribution and cycling of elements within and between different Earth systems, including the solid Earth, atmosphere, and oceans.

<https://purdue.curriculog.com/proposal:16248/form>

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

Graduate Council Document 21-61a, ANSC 51600, Molecular Microbiome Analysis (PWL)
Lecture 2 times per week for 75 minutes. Credit 3.

The overall goal of the course is to provide students with an advanced understanding of microbial ecology in the animal microbiome and how to analyze next-generation sequencing data of amplicon libraries. In order to complete this goal, students will participate in activities including classroom lecture, group discussion, critical reading of literature, written assignments and exams, and student projects. Permission of instructor required.

<https://purdue.curriculog.com/proposal:18995/form>

Graduate Council Document 21-28c, FNR 57400, Big Data, AI, And Forests (PWL) Lecture 2 times per week for 75 minutes. Credit 3.

This course is focused on introductory big data analysis, artificial intelligence, and associated applications in large-scale forest research. The lecture will cover the challenges we encounter in big data ecological research, and the approaches to overcome these challenges. Real-time forest inventory and wildlife survey data at national and continental levels will be utilized in this course, and actual high-impact research projects will be introduced as case studies to inform students of the state-of-the-art in this subject area. High-performance computing clusters will be utilized for big data analysis.

This course is also open to non-forestry majors. We will introduce basic machine learning techniques that are applicable to other subject areas. Guest lectures may cover big data analyses in different fields, internet-of-things, and/or data management and optimization/decimation for collaborative Virtual Reality experiences.

The class will be evaluated through a final project, for which students will work independently or in a group setting to develop a 'mini' research manuscript with a title of their own selection. All the groups are encouraged to submit their manuscript for publication at peer-reviewed journals, and those whose manuscripts have passed the initial journal screening will get extra bonus points.

<https://purdue.curriculog.com/proposal:18365/form>

Area Committee F, Management Sciences (TBD):

Graduate Council Document 21-62a, TDM 51100, Corporate Partners (PWL) Lecture 2 times per week for 75 minutes. Distance. Credit 3.

Students in The Data Mine Corporate Partners Learning Community will work in groups with Corporate Partner mentors on a variety of projects. They will analyze real data related to questions that the Corporate Partner proposes. Most projects will last for a full academic year (late August through late April), with multiple reports and presentations given more frequently. The mentor is expected to meet with the students weekly by Microsoft Teams, or (more rarely) in person. Students are expected to actively participate in these meetings and in all individual and group work. The goal of the course is to help students build impactful industry related skills in data science, visualization, and data engineering. The Data Mine staff also has data scientists who can assist students with technical questions focused on the skills being built and the research conducted. Students can work on real-world industry facing issues that have a high value add for the corporate partner.

<https://purdue.curriculog.com/proposal:18483/form>

DEGREE(S):

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

Graduate Council Document 22-3a, MS in Dietetics for the Department of Nutrition Science (PWL)

<https://purdue.curriculog.com/proposal:17981/form>

APPENDIX C



Graduate Council Document 21-H
Presented to the Graduate Council on September 17, 2021 and January 20, 2022

Authorship of Scholarly Works (S-)

Standard: [University Policy Office will complete]

Responsible Executive: Provost and Executive Vice President for Academic Affairs and Diversity

Responsible Office: Research Integrity Office

Date Issued: [University Policy Office will complete]

Date Last Revised: N/A

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CONTACTS

Clarification of Standard		
Title/Office	Telephone	Email/Webpage
Research Integrity Officer	765-496-3844	researchintegrity@purdue.edu

INDIVIDUALS AND ENTITIES AFFECTED BY THIS STANDARD

All Purdue Associates who make a scholarly contribution to research or the reporting of research in scholarly works.

STATEMENT OF STANDARD

Accuracy of authorship attribution is paramount to scholarly integrity and maintaining the public trust in the research and scholarship generated from Purdue University. Attribution of authorship is as critical to the integrity of the publication record as the reported methodology, interpretation or conclusions. Inaccurate identification of authors harms the participating scholars and the credibility of the research and the institution.

This standard affirms the university's commitment to research and scholarship integrity as represented by listed authors and associated acknowledgement sections. This standard and its requirements are rooted in, and informed by, Purdue's overarching Statement of Integrity and Code of Conduct.

Suitable Authorship Practices

All Purdue Associates are required to list authors of scholarly works in accordance with authorship norms commonly accepted within a particular domain of scholarship and in accordance with the following:

1. List authors accurately and completely;
2. Do not list any gift authors, guest authors or ghost authors (see Unacceptable Authorship Practices below); and
3. Apportion credit fairly and accurately (through the order of authorship or other means).

This standard applies to all situations that include, or allegedly should include, a Purdue Associate as a co-author.

Authorship Defined

Many organizations, journals and conferences publish guidelines for author identification. In the absence of such a guideline, include authors based upon the following from the Committee on Publication Ethics (COPE):

1. Substantial contribution to the work (e.g., conception, design, acquisition, analysis or interpretation); and
2. Accountability for the work that was done and its review, approval and presentation in a publication.

At Purdue University, substantial contribution to a work that deserves credit as an author requires both material participation and intellectual contribution. Credit for Co-author is expected when an individual both materially participates in a research project and provides intellectual contribution for which a resulting publication would suffer if it were lacking.

Acknowledgements may be used to denote contributions to the work that do not meet the criteria of authorship, such as supporting the study, general mentoring, acting as study coordinator and other related auxiliary activities.

Author Order

The meaning of author order may vary by discipline or publication. Purdue Associates are encouraged to follow discipline or source conventions in the ordering of authors. Typically, the order of authorship conveys level of contribution. If there is equal involvement, authors are often ordered alphabetically by surname.

Where there is no prevailing convention and authorship is unequal, Purdue Associates should strive for correct representation based on contribution to the work. It is encouraged that Purdue Associates discuss and agree upon authorship and author order at the outset of a project.

Unacceptable Authorship Practices

Purdue Associates are required to avoid any manipulation of author identification to mislead the reader. In particular, the following practices are unacceptable:

1. Gift authorship – co-authorship given as reward or repayment to someone who did not contribute significantly to a work; “quid pro quo” authorship.
2. Guest authorship – co-authorship given due to reputation or influence to increase the potential for acceptance of the publication, when the co-author did not contribute significantly to the work; “honorary” authorship.
3. Ghost authorship – concealment of an author’s hand in the research or report of research.

Resolution of Authorship Disputes

A Purdue Associate who experiences an inaccurate or omitted authorship identification is encouraged to seek satisfactory resolution from the lead author or Corresponding author. If attempts to resolve the issue fail, the associate may report the concern in writing to the Research Integrity Officer.

The Research Integrity Officer and/or a tenured faculty member of their choosing, with no conflict of interest, will mediate among authors to obtain a voluntary resolution to the dispute. Choices of tenured faculty could be: disinterested faculty in the appropriate discipline, the chair of a unit graduate program, the associate dean of research, or others. If a voluntary resolution is not reached, the Research Integrity Officer will, in consultation with the Office of the Provost, refer the dispute to an appropriate academic head or dean to advise the Office of the Provost on an appropriate resolution.

In the event that a credible allegation of plagiarism exists in addition to the authorship dispute, the allegation will be subject to review under the University's policy on Research Misconduct (III.A.2).

This standard does not supersede intellectual property rights outlined in University Policy I.A.1. Intellectual Property and Standard S-19 Courseware and Online Modules.

RESPONSIBILITIES

Purdue Associates

- Understand this standard and use it as a guide for establishing authorship credit, author order and appropriate acknowledgement in all scholarly activities.
- Report in good faith inaccurate, omitted or unacceptable authorship information as outlined in this standard.
- Abstain from the unacceptable practices of gift, guest and ghost authorship.
- Communicate this standard to other Purdue Associates in the course of research work and graduate advising at Purdue University.
- When requested, work with Purdue officials to resolve authorship disputes

Dean/Associate Dean and School/Department Head/Chair

- Understand this standard and use it as a guide for helping faculty establish appropriate authorship credit, author order and acknowledgement when called upon to do so.
- Report in good faith inaccurate, omitted or unacceptable authorship information as outlined in this standard.
- Using this standard as a guide, assist in resolving authorship disputes.

Provost

- With guidance from the RIO, assign an academic head or dean to mediate and propose an authorship dispute resolution if faculty mediation fails to resolve the situation.
- When disputes involve external parties, work with the RIO to assign an appropriate individual to mediate and propose an authorship dispute resolution.

Research Integrity Officer

- Administer this standard.
- Receive reports of inaccurate, omitted or unacceptable authorship information as outlined in this standard and coordinate resolution of authorship disputes.

DEFINITIONS

All defined terms are capitalized throughout the document. Refer to the central Policy Glossary for additional defined terms.

Acknowledgment

Recognition of a participant whose involvement does not meet the discipline's recognized criteria for authorship.

Co-author

A participant whose contribution to a scholarly work meets the discipline's recognized criteria for authorship.

Corresponding Author

Sometimes also called primary author; a participant who takes primary responsibility for the submission and communication with the publisher and responds to any questions about the work during and after publication.

Principal Investigator

Principal Investigator is the primary individual responsible for the preparation, conduct, and administration of a research grant, cooperative agreement, training or public service project, contract, or other sponsored project in compliance with applicable laws and regulations and institutional policy governing the conduct of sponsored research.

Purdue Associate

See definition in the policy on [Research Misconduct \(III.A.2\)](#).

Research Misconduct

See definition in the policy on [Research Misconduct \(III.A.2\)](#).

RELATED DOCUMENTS, FORMS AND TOOLS

This standard is issued in support of the policy on [Research Misconduct \(III.A.2\)](#), as amended or superseded.

HISTORY AND UPDATES

[TBD]: This is the first standard to address this issue.

APPENDIX

There are no appendices to this standard.

APPENDIX D



GRADUATE COUNCIL

Graduate Council Report 21-L
Presented to the Council on November 18, 2021

To: Purdue University Graduate Council
From: Jamie Mohler, Associate Dean
Date: November 18, 2021
Subject: GC Report for Guidelines and Expectations for Stackable Certificates Leading to a Master's Degree

Being able to “stack” certificates towards a master’s degree can be advantageous for students. At times, a student does not have the confidence, or possibly the interest, in pursuing a master’s degree but does see value in post-bachelorette certificates. Yet, once a student has completed one or more certificates and then feels confidence in pursuing an applicable master’s degree they may wish to stack those certificates towards a master’s degree that allows it. Additionally, certain programs may desire purposefully stacking two or more certificates towards a master’s degree.

Enabling the stacking of certificates towards master’s degrees, then, can be advantageous. Students can obtain certificates on the way towards a master’s degree, but those pursuing master’s degrees may obtain appropriate certificates when the coursework taken meets the requirements of those certificates and so long as the following requirements are met:

- Each certificate in a stacked scenario must have nine unique credits apart from any other certificate being pursued and a maximum of three certificates can be used toward a master’s degree.
- Any overlapping courses amongst certificates must be replaced with appropriate courses (as determined by the student and major advisor) such that the resulting master’s degree has no duplicative or “double counted” courses.
- A student cannot obtain both a certificate and a degree concentration or degree major with the same name as the certificate.
- A student may be enrolled in multiple certificates at the same time as enrollment in a master’s degree.

- Certificates stacking towards a master's must be awarded prior to or concurrently with the master's degree.
- Certificates stacking towards a master's must be awarded prior to or concurrently with the master's degree.
- Previously awarded certificates may be used towards a master's degree if less than a five-year gap exists between graduation with the certificate program and the beginning of the master's degree.

For certificates to stack towards a master's degree in the manner described here, the unit to which the degree belongs to must request administrative approval from the Graduate School to count them toward the degree. Students cannot indiscriminately try to stack random certificates toward a degree without unit consent and subsequent Graduate School approval.

NEW DOCUMENTS RECEIVED
(After the February 17, 2022 Graduate Council Meeting)

GRADUATE COURSE PROPOSALS:

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

Graduate Council Document 22-16a, SLHS 56501, Vestibular Assessment And Rehabilitation (PWL) Lecture 2 times per week for 110 minutes for 8 weeks. Laboratory 1 time per week for 110 minutes for 8 weeks. Credit 3.

This course will review anatomy and physiology of the vestibular system. Diagnostic assessment, interpretation and proper recommendation techniques will be discussed. Current research addressing dizziness and balance issues will be reviewed as well as case history discussions to help prepare students to see these patients in a clinic setting.

The clinical practice of audiology encompasses the assessment and habilitation/rehabilitation vestibular and balance disorders arising from a wide variety of medical and environmental etiologies. It is essential that audiologists have a firm understanding of the most common causes and medical treatments of vestibular disorders for all age groups.

Additionally, vestibular assessment and treatment options are expanding rapidly in the past 5-10 years. Student clinicians need exposure to this area of care so that they may grow as research and technology change. Audiologists practice in a medical setting and thus must be comfortable with the medical approaches and terminology used by otolaryngologists, otologists, neuro-otologists, pediatricians, physical therapists and other allied health professions.

<https://purdue.curriculog.com/proposal:17983/form>

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

Graduate Council Document 22-19a, AT 54300, Contemporary Issues in Airport & Airline Finance (PWL) Distance. Credit 3.

This course provides an overview of aviation financial management and is intended for current and future aviation and aerospace leaders and managers. Taking a global view, the course opens with the tremendous economic impact of the aviation sector that both drives and enables the interdependent global economy. The course material covers the unique business models and best practices in financial management for both the airport and airline industries and analyzes the relationship between the two (including the complications implicit in highly divergent planning horizons). The complexity of aircraft financing decisions is covered that lead up to building a fleet to serve the airlines' forecast growth. The course uses relevant readings and case studies as well as statistical data in time series to demonstrate the way financial management has evolved to improve performance in both the airport and airline industries. Permission of department required.

<https://purdue.curriculog.com/proposal:16581/form>

Graduate Council Document 22-20a, CIT 51101, iOS Mobile Application Development (IUPUI) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): Any programming course equivalent to 300-level programming. Any relational database course equivalent to 200-level database course.

This advanced programming course teaches students to create data-driven, location-aware mobile applications for the iOS platform. Students will learn common mobile app design patterns and will integrate cloud computing services into their applications. Prerequisite: Any programming course equivalent to 300-level programming. Any relational database course equivalent to 200-level database course.

<https://purdue.curriculog.com/proposal:18254/form>

Graduate Council Document 22-20b, CIT 51102, Android Mobile Application Development (IUPUI) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): Any programming course equivalent to 300-level programming. Any relational database.

This advanced programming course teaches students to create data-driven, location-aware mobile applications for the Android platform. Students will learn common mobile app design patterns and will integrate cloud computing services into their applications. Pre-requisite: Any programming course equivalent to 300-level programming. Any relational database.

<https://purdue.curriculog.com/proposal:18255/form>

Graduate Council Document 22-18a, CE 53610, Behavior Of Reinforced Concrete And Composite Structures (PNW) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): CE 47100.

This course introduces advanced topics related to behavior of reinforced concrete (RC) and composite structures with emphasis on ductility of members and reinforcement detailing for seismic loads. Topics that are introduced in this course include flexural behavior of RC beams, design of two-way slabs using the direct design method and equivalent frame method, analysis and design concrete encased composite members including both beams and columns, axial behavior of concrete filled box columns, and the strut-and-tie model.

<https://purdue.curriculog.com/proposal:17771/form>

Graduate Council Document 22-4b, ME 51210, Introduction To Aerodynamics (PNW) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): ME 31200 with C or better.

This course is an introductory upper level class on aerodynamics and will cover the fundamentals of aerodynamics on fixed, rotatory and flapping wings. Classic aerodynamic theories and models, including Kutta-Joukowski theorem, lifting line theory, blade element method, disk momentum theory, quasi-steady model and etc will be explained and discussed in the class. Additionally, lab sections will be added to the class for an in-depth understanding about the subject. Permission of instructor required.

<https://purdue.curriculog.com/proposal:17799/form>

Graduate Council Document 22-4c, ME 54310, Solar Energy Engineering Systems (PNW) Lecture 2 times per week for 75 minutes. Credit 3. Prerequisite(s): ME 31600 with C.

This course will cover various topics in solar engineering system, including solar radiation, flat plate collector, concentrating collectors, solar system for heating/cooling, solar desalination and photovoltaic system. A PV system designing software (PVsyst) will be introduced for the final project. Permission of instructor required.

<https://purdue.curriculog.com/proposal:17877/form>

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

Graduate Council Document 22-11a, FS 55402, Food Processing (PWL) Lecture 3 times per week for 50 minutes for 5 weeks. Credit 1.

The Food Processing course will present an overview of the basic food engineering concepts and unit operations involved in the manufacture of various food products. Students will be able to understand the food processing literature and to effectively communicate with food technologists and engineers. Topics to be covered include: physical properties of foods, unit operations commonly found in the food industry, and processing equipment. Permission of department required.

<https://purdue.curriculog.com/proposal:19809/form>

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

Graduate Council Document 22-13a, HORT 57200, Stakeholder Involvement In Landscape Management (PWL) Cross-listed with NRES 57200. Lecture 1 time per week for 100 minutes. Credit 2.

Engaging the public in natural resource decision making is an increasingly important and complex task. This course provides an overview of how to include diverse stakeholders in decision making, collaboration, and conflict resolution through readings, class discussions, and role plays.

<https://purdue.curriculog.com/proposal:20023/form>

Graduate Council Document 22-14a, NRES 57200, Stakeholder Involvement In Landscape Management (PWL) Cross-listed with HORT 57200. Lecture 1 time per week for 100 minutes. Credit 2.

Engaging the public in natural resource decision making is an increasingly important and complex task. This course provides an overview of how to include diverse stakeholders in decision making, collaboration, and conflict resolution through readings, class discussions, and role plays.

<https://purdue.curriculog.com/proposal:19846/form>

CERTIFICATE(S):

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

*Graduate Council Document 22-3, Postbaccalaureate Certificate in Healthcare Technology
from the Interdisciplinary Engineering Program, PWL*
<https://purdue.curriculog.com/proposal:20414/form>