PURDUE UNIVERSITY
GRADUATE SCHOOL

Minutes of the Graduate Council Meeting
February 21, 2019
1:30 p.m.

Fifth Meeting
Room 310
STEW

PRESENT: Linda J. Mason, chair, Council Members, Dulcy M. Abraham, Blake A. Allan, Thomas W. Atkinson, Taylor W. Bailey, Rita A. Burrell, Ryan A. Cabot, Kuan-Chou Chen, David S. Cochran, William (Bart) Collins, G. Jonathan Day, Brian R. Dineen, Duane D. Dunlap, Melissa M. Franks, Keith B. Gehres, Richard H. Grant, Patricia Hart, Signe E. Kastberg, David B. Klenosky, Maricel A. Lawrence, Michael C. Loui, Samuel P. Midkiff, James L. Mohler, Melanie Morgan, Paul F. Muzikar, David G. Skalnik, Manushag (Nush) Powell, Paul Salama, Megan Sapp Nelson, Abraham Schwab, Mitchell L. Springer, Rebecca H. Stankowski, Xavier M. Tricoche, Kevin Trimble Candiss B. Vibbert (Provost's Representative), Nicole J. Widmar Daoguo Zhou

APOLOGIES FOR ABSENCE RECEIVED FROM: Michael J. Connolly, Mary E. Johnson, Rhonda G. Phillips, Carol S. Sternberger

ABSENCES: Christopher R. Agnew, Janice S. Blum, Marius D. Dadarlat, Susan M. Mendrysa, John A. Morgan, Anson Soderbery, Yoon Yeo,

GUESTS: Debbie Fellure, David Starnes, Korena Vawter

I. MINUTES

The minutes of the January 17, 2019, Graduate Council meeting with a correction to Area Committee E presenter as Richard Grant with approval.

II. DEANS REMARKS AND REPORTS

a) Dr. Linda Mason reminded the Graduate Council members when having discussions with their units on the research credit requirement that was passed last year was to start in the Fall semester for students taking a research credit of 59800/59900. In the first two weeks of the semester students are to have a plan on what the requirements are for that credit to receive an S grade versus a U grade and make sure that has been documented. We had a few discussions that a student did not know anything about this. We are continuing to get the word out that this is a requirement by Council that was passed last year. We expect that this will be done however units want to do it.

The electronic version is in the works when students register for the class; however, we are not there yet. Again, if there is nothing in there and you go up for a grade appeal when the student gets a "U", the Graduate School is not behind the unit and units will be on their own. The expectation should be noted clearly, so that everyone is aware of that.

b) Dr. Mason noted that the Higher Learning Commission (HLC) review requirements against the goals. Marge Wu will be leading the review going back three years (last year, the previous year, and this year's data). Dr. Mason noted that the review will not be generating a large report as in the past and HLC reading through all of the data in terms of what we are doing right or wrong and come back with a recommendation. They will use an electronic entry and tapping against those goals so that they will randomly go to graduate programs and look to see how programs are doing. We want to make sure that they do not randomly pick departments that do not have anything in there, which would not look good. We do not know whom they are going to pick and we do not have control over that, so this is a gentle reminder. If you have questions, you may contact Jamie Mohler if units need guidance.

c) Dr. Mason reminded the Graduate Council of the discussions recently of things that the graduate school can offer as far as degrees and the way in which we can offer educational information to students. Depending on where they fit in, this is the continuing discussion about non-credit to credit, to the certificate, to stacking the certificates, to a degree.

Dr. Mason noted that Dr. James Mohler will provide an update on where we are with the degree itself. The Graduate School will not develop the information that goes in to our degree; that will be dependent on the faculty to stack and build those buckets that we are creating. Dr. Mason noted that the Graduate School is working with several departments to create the things that will go into the buckets for them. As units have discussions and look at where graduate education is going and the type of offerings units are going to have, please have these discussions while thinking creatively. We will work with units to decide how to put things in a bucket and move it through to a degree, but the Graduate School will not create the things that go into the bucket. We are trying to be proactive and create the mechanism for units to generate the types of stackable credentials that we could have.

d) Dr. James Mohler noted that we had this idea of creating a specific Master of Science Degree in Interdisciplinary Studies so it is not a named degree. It is a generic master's degree and the goal would be to be able to create various majors underneath of that. The first one we started working on last Fall is a partnership between Purdue Polytechnic, Chemical Engineering, Crane Navel as well as Cranford University and it goes one extra step in talking about a dual degree in that case. This Interdisciplinary Master of Science would give the ability for colleges to come together in an interdisciplinary fashion at the Graduate School level rather than it being in any particular college. It is not meant to supersede anything and it does not mean the colleges cannot continue to do interdisciplinary things within their own units if they choose. This just gives another vehicle to be able to do something at the university level. Dr. Mohler noted that we are still working on the details of the proposal of that first instance of the degree. This vehicle not only give us this idea of doing this degree for Crane, it actually gives us the ability to do some of the things that Purdue Online is talking about where we are able to take a certificate and a student wants to get a certificate and then they get another one. Those two certificates might stack with one other element that may be another certificate or it might just be a collection of courses to create a master's degree.

Dr. Mohler noted that this gives us a very flexible container to approach industry with from the standpoint of they can come to this litany of certificates or other things, and say a unit wants to take all these pieces and they want their employees to do X, Y and Z and get a master's degree. One of the big questions that comes up is the idea of a student gets a certificate and take some extra things and get a master's. The question is, what if you go right to the master's, can you get the certificates? Our initial thinking is no, mainly because if you were to do a direct Ph.D. you usually do not get the master's degree; that is usually the exit vehicle. It is not to say that we are against it; that is the current thinking. Dr. Mohler noted that we want this to be a flexible element that pretty much anybody could do, not just anybody at West Lafayette, but anyone who has the system should they choose to do so.

Dr. Mohler noted the title of the new degree is *The Master of Science in Interdisciplinary Studies with a Major in Defense Engineering and Technology*. That is one instance of this vehicle. The other instances are whatever a unit wants to make it. Do you have to use it? No. Does it supersede a college doing what it wants to do? No, but it gives units another vehicle. We are open to what faculty might propose. All we are doing is putting the vehicle out there, and again it is the idea that it is how does faculty want to use it because this is new for us. The graduate school has interdisciplinary programs, but it has never been the awarding entity so that is the part that is different.

e) Dr. James Mohler gave a report on pending degree program proposals in various stages of review and approval.

f) Dr. James Mohler gave a report on pending course proposals in review with the Graduate Council area committees, proposals awaiting additional information from proposers, course proposals requested by departments for removal, and new course proposals received since the previous Graduate Council meeting.

III. AREA COMMITTEE REPORTS (Area Committee Chairs)
Graduate Council Document 19B, Graduate Council Documents Recommended for Approval:

Area Committee D, Humanities and Social Sciences (Manushag (Nush) Powell, chair; mnpowell@purdue.edu):

Graduate Council Document 18-35b, **AMST 60500, Theory and American Culture** (PWL
Graduate Council Document 18-58a, **LING 55000, Corpus Linguistics** (PFW)

Dr. Manushag Powell presented two courses for consideration. The courses were approved by the council, upon a motion by Dr. Powell.

Area Committee E: Life Sciences, Ryan Cabot, chair; rcabot@purdue.edu):

Graduate Council Document 18-27c, **HSCI 67400, Radiological Diagnostic Imaging Internship** (PWL)

Dr. Ryan Cabot presented one course for consideration. The courses was approved by the council, upon a motion by Dr. Cabot.

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

Graduate Council Document 18-9f, **MGMT 58600, Python Programming** (PWL
Graduate Council Document 18-9a, **MGMT 58800, Business Insights with Spreadsheets and Macro Programming** (PWL)

Dr. Nicole Widmar presented two courses for consideration. The courses were approved by the council, upon a motion by Dr. Widmar.

MAJORS:

Area Committee A, Behavioral Sciences (Signe Kastberg; chair, skastber@purdue.edu):

Graduate Council Document 18-52a. **Major in Clinical Psychological Sciences,** submitted by the Department of Psychological Sciences, PWL

Graduate Council Document 18-53a. **Major in Cognitive Psychology,** submitted by the Department of Psychological Sciences, PWL

Graduate Council Document 18-54a. **Major in Industrial-Organizational Psychology,** submitted by the Department of Psychological Sciences, PWL

Graduate Council Document 18-55a. **Major in Mathematical and Computational Cognitive Science,** submitted by the Department of Psychological Sciences, PWL

Graduate Council Document 18-57a. **Major in Social Psychology,** submitted by the Department of Psychological Sciences, PWL

Dr. Signe Kastberg presented five majors for consideration. The majors were approved by the council, upon a motion by Dr. Kastberg.

CERTIFICATE(S):

Area Committee B, Engineering, Sciences, and Technology (Samuel Midkiff; chair, smidkiff@purdue.edu):

Graduate Council Document 18-38a. **Certificate in Engineering Design Innovation,** submitted by the Department of Mechanical Engineering, in the School of Engineering and Technology, IUPUI

Dr. Samuel Midkiff presented one certificate for consideration. The certificate was approved by the council, upon a motion by Dr. Midkiff.

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

Mr. Taylor Bailey, President of the Purdue Graduate Student Government (PGSG) noted the PGSG had three major events:

- Mental Health Awareness Week
- Next Generation Scholars Event
- Spring Career Fair

Mr. Bailey noted that the next event this year is spending part of a day in community service during the week of Spring Break. The PGSG group connects with other agencies in the Greater Lafayette Region.

Mr. Bailey noted that The Graduate Student Bill of Rights Responsibilities project is still ongoing. Since the last Graduate Council meeting, Mr. Bailey sent a message to the Graduate Council asking for feedback. There has been open communication with the University Senate and a graduate student attended the Faculty Affairs Committee meeting to get specific feedback from that group. At the present time, there are some suggested edits that are relatively minor. We are going to address some of the major concerns that have been proposed. Those suggested edits will be reviewed by our Senate next week, so I do not have a document that would be official and ratified to pass to the Council. I am open to any suggestions, recommendations noting that is on the agenda for later so we can hold off if there are any discussions. The University Senate is forced to reconsider their original action endorsing Senate document 1802. They have chosen to postpone that action until they know what we are doing. Anyone who is following the Senate they are not ignoring the fact they have to do something, they are just trying to be efficient in the way that they are doing it. The suggestion is if the document changes, it will change the way that the Senate approaches doing this; hopefully, in the interest of efficiency. It is our hope to have a new ratified, slightly edited document to present to the full Council next month.

LJM: We would like to be able to remove this from the Graduate Council agenda after several years and vote in April. Dr. Mason asked that if anyone has any significant/insignificant or minor critique to get those to Taylor so that it can be incorporated so we can move forward. If the Senate does not move forward, originally the idea was the Graduate School is the final body that approves graduate education. It would be preferential if the Senate were to approve first and then the Graduate School, but we are not going to wait if the Senate does not give their endorsement. We will be taking action in April so any edits should come back in March.

Mr. Bailey noted the next Senate meeting is on Wednesday, so any edits will need to be approved by our Senate which is why I sent out that original email two weeks ago. We need these edits as soon as possible in order for them to be effectively incorporated if it something that would influence change. Mr. Bailey noted that they have received a good amount of feedback from the Senate Affairs Committee, the Graduate Council, and the Faculty Affairs Committee. There is a lot of overlap in the specific sort of larger concerns which lead to the things that we have been able to address sufficiently that enough people will be okay. If there any additional considerations, please send as soon as possible.

Council Member: We raised it up at the College of Engineering Grad Chairs meeting and the Chairs were given the charge to go back to our departments and get feedback from faculty as well as graduate students. We are compiling that in the college and Eckard Groll will be sending that to the Graduate Council with a summarization. The question that was raised in the Grad Chair meeting yesterday was, "What exactly does endorsement of the Graduate Council and endorsement by the Senate mean?" One of the comments from Civil Engineering particularly the graduate students – "is this document legally binding?" When you hear the word 'endorsement' another question that comes up is this document legally binding? Clarification about both of these questions is needed.

Taylor Bailey: The document is not intended to be an enforceable policy at any level legally or internally within the institution. The interest of trying to include endorsement from the two governing faculty bodies is symbolic. It is meant to emphasize a commitment on behalf of faculty and students with everyone agreeing these are important considerations that should help shape what the graduate experience should be and that is all it is. One of the changes that has been made very explicitly states in the introduction that - *This is not policy. This is aspirational*. There is an onus on Purdue Graduate Student Government (PGSG) specifically that also this is something that get shared and adopted as a guideline of best practices that is communicated well. Unequivocally, it is not intended to create rules or to be enforceable. The goal is to promote a positive culture where students are informed, there is a standardized expectation of this is what the graduate student experience should be, and creates the context where students feel that they have needs that are not being met someone has told them this is something to think about. Hopefully, it empowers them to ask questions or to address anything in terms they may have before they get four years into their program and ultimately quit.

LJM noted that it is the starting point of discussions for both students and faculty to talk about what makes up the graduate experience and we as the body that represents graduate education by endorsing this say that these are values that we believe in and want to have those discussions. This has been discussed with Purdue legal – this is not a policy document, it will not be incorporated into a policy document, and it is not meant to be used by someone saying, "You have to give me this."

Taylor Bailey added that he discussed this with Dean Jeff Stefancic in the Office of Students Rights and Responsibilities. Mr. Bailey clearly noted that he is happy to allow this to be a document as long as it is very clear that his office cannot enforce this as if it were policy the same way other Students Bill of Rights policies are actually enforceable. To the specific note from Professor Landry amending the language in the Senate resolution to say, "endorse the sentiments of the document" as opposed to endorse the document. Mr. Bailey noted that it is inconsequential to which one it is because the ultimate result is the same. Mr. Bailey is not trying to trick the faculty into creating a policy document because of that language. If the language were to be "we agree with the sentiment of what is expressed" that is actually what they are looking for in the endorsement of the document.

Council Member: I wonder if the problem isn't the name of it calling it, "The Bill of Rights" as we are all familiar with the Bill of Rights which is enforceable. Maybe we want to call it a "Bill of Inspiration."

Council Member: How about, "Suggested Best Practices."

Taylor Bailey: Formally speaking from a legal perspective idea is any word in that effect is the same. Just because I have used the word "right" does not create any additional power of the word. If I use the word "expectation," the result in expectation is the same. Fundamentally, when we were talking about rights we are talking the philosophical context that these are things that we are reporting we have a right to without there being content policy that creates the right. That is why I am careful to say the document itself is aspirational, but just because it is aspirational does not mean we are not discussing things we consider fundamentally to be the rights of graduate students.

Council Member: So, if somehow the grad student had a specific complaint against the advisor to their department there are certain events and channels that would happen. Would passing this have no effect on that?

Taylor Bailey: It would not have any effect on that. Ideally, one thing that is included in this document is a suggestion that graduate programs should have a manual that lays out that procedure to a student. In some cases, students may not be aware of what that procedure is if they do have those events. Hopefully, the document informs and empowers a student to recognize a situation where they should be trying to seek a resolution or asking a question.

Council Member: But it would not change the actual sequence of events of what happens?

Taylor Bailey: Nothing changes.

Council Member: I know that most of the schools in the College of Engineering have Graduate Student Handbooks with many of the things discussed in the Bill of Rights are also in there. We may consider what could be added or deleted from the document based on what is stated in The Bill of Rights and Responsibilities.

LJM: I would say you would keep your manual because it is policy.

Council Member: Yes, it is.

Taylor Bailey: That is why our document represents the programs own document. We do not want to suggest too many specifics that hinder the applicability across all the programs. We left our document specific enough to address issues, but to be valuable to whichever program the student is not related to the Bill of Rights.

V. NEW BUSINESS

Lisa Nielsen, Grant Writer and Postdoc Director for the Graduate School gave a presentation on Postdoc Office Initiatives. There are 483 postdocs on the West Lafayette Campus.

The Role of the Postdoc Office

- We exist to help postdocs with all aspects of their wellbeing at Purdue by providing resources and administering policies.
- Our goal is to facilitate career development across campus for postdocs.

Postdocs Goals:

Core Competencies from the National Postdoc Association (NPA)

1. Discipline-specific conceptual knowledge
2. Research skill development
3. Communication skills
4. Professionalism
5. Leadership and management skills
6. Responsible conduct of research

National Postdoc Association, https://www.nationalpostdoc.org/page/CoreCompetencies

Focus for the 2018-2019 year:

- Creating and Delivering Postdoc Orientations
- Providing and Assessing Grant Writing Resources
- Promoting Career Development Resources
- Help Postdocs adjust to Purdue

Orientation sessions are offered three times a semester.

Upcoming Orientation Sessions:

- **March 1**
- **May 3**
- **June 7**

Orientation Topics:

- Role of the Postdoc Office
- Salary and Benefits
- National Postdoc Association and Purdue Postdoc Association
- Purdue Resources for Research
- Campus Resources for Wellbeing
- Community Opportunities

Monthly Grant Writing Seminars

Thursday, December 6th

- "NSF and NIH Grant Review Processes"

Thursday, January 17th

- "NSF Broader Impacts Section"

Thursday, January 14, 1:30 – 2:30, Young B64

- "Writing Mechanics: Extreme Editing Processes"

Thursday, January 21st, 1:30 – 2:30, Young B64

- "Grant Writing Language and Style"

Upcoming Sessions:

- Thursday, April 18th, 1:30 – 2:30 Young B64
- Thursday, May 10th, 1:30 – 2:30 Young B64

VI. CLOSING REMARKS AND ADJOURNMENT

Dr. Linda Mason reminded the council members of the Housing survey that will be going out to graduate students. There are conversations with Purdue Research Foundation (PRF) about the growth of the west side of campus with the loss of the Purdue Village on campus. There is land that is designated to set aside to replace graduate student housing with the new developments to the west. The model will be different than Purdue Village as it was built in 1940's and 50's. PRF needs to know what graduate student housing needs are.

Dr. Mason noted The Three Minute Thesis (3MT™) and Say IT IN 6 will be held on Tuesday, April 16, 2019 in Loeb Playhouse at 7:00 p.m.

The council meeting was adjourned by Dr. Mason at 2:35 p.m.

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

APPENDIX A

PENDING DOCUMENTS

(February 21, 2019)

BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

Area Committee B, Engineering, Sciences, and Technology (Samuel Midkiff; chair, smidkiff@purdue.edu):

***Graduate Council Document 18-60a,* CGT 53400, Automation of Digital Product Development Processes (PWL)**
***Graduate Council Document 19-1a,* CGT 54500, Game Development I (PWL)**
***Graduate Council Document 19-1b,* CGT 55500, Game Development I (PWL)**
***Graduate Council Document 19-1c,* CGT 64500, Game Research (PWL)**
***Graduate Council Document 18-22a,* IE 68500, Competitive Strategy (PWL)**

Area Committee C: Chemistry, Engineering, and Physical Sciences, Chair to be determined):

***Graduate Council Document 18-4d,* BME 50100, Multivariate Analyses in Biostatistics (PWL)**
***Graduate Council Document 18-59a,* EAPS 60200, New Graduate Student Seminar (PWL)**

Area Committee D, Humanities and Social Sciences (Manushag (Nush) Powell, chair; mnpowell@purdue.edu):

***Graduate Council Document 18-35b,* AMST 60500, Theory and American Culture (PWL)**
***Graduate Council Document 19-2a,* ENGL 60111, Introduction To Scientific, Technical, Medical, And Healthcare Communication (PWL)**
***Graduate Council Document 19-2b,* ENGL 60211, Science Writing (PWL)**
***Graduate Council Document 19-2c,* ENGL 60311, Medical and Healthcare Writing (PWL)**
***Graduate Council Document 19-2d,* ENGL 60411, Writing Proposals and Grants (PWL)**
***Graduate Council Document 18-58a,* LING 55000, Corpus Linguistics (PFW)**
***Graduate Council Document 19-3a,* PHIL 55300, Mathematical Logic (PWL)**
***Graduate Council Document 19-3b,* PHIL 56100, Reading Philosophy: Skills And Strategies (PWL)**
***Graduate Council Document 19-3c,* PHIL 56200, Reading To Argue (PWL)**
***Graduate Council Document 19-3d,* PHIL 56400, Walk-Along Language Lab (PWL)**
***Graduate Council Document 19-3e,* PHIL 57100, Writing To Learn (PWL**
***Graduate Council Document 19-3f,* PHIL 57200, Writing To Argue (PWL)**

Area Committee E: Life Sciences, Ryan Cabot, chair; rcabot@purdue.edu):
***Graduate Council Document 18-27c,* HSCI 67400, Radiological Diagnostic Imaging Internship (PWL)**

Area Committee F, Management Sciences (Nicole J. Widmar, chair; nwidmar@purdue.edu)
Per Dr. Brian Roberson, Associate Professor of Economics, Director of Graduate Studies in Economics, has requested ECON 63300, 64100, 65300, 68100, 68200 and 68100 be withdrawn for consideration as of 2/14/19.
***Graduate Council Document 17-11a,* ECON 63300, Macroeconomics with Heterogeneous Agents (PWL)**
***Graduate Council Document 17-11b,* ECON 64100, Computational Economics/Numerical Methods (PWL)**
***Graduate Council Document 17-11c,* ECON 65300, Economics of Early Childhood and Skill Formation (PWL)**
***Graduate Council Document 17-11d,* ECON 68100, Bayesian Econometrics I (PWL)**
***Graduate Council Document 17-11e,* ECON 68200, Bayesian Econometrics II (PWL)**
***Graduate Council Document 18-9f,* MGMT 58600, Python Programming (PWL)**
***Graduate Council Document 18-9a,* MGMT 58800, Business Insights with Spreadsheets and Macro Programming (PWL)**

NEW DOCUMENTS RECEIVED

(After the February 21, 2019 Graduate Council Meeting)

Area Committee A, Behavioral Sciences (Signe Kastberg; chair, skastber@purdue.edu):

Graduate Council Document 19-31a, **SLHS 54300 Assessment And Treatment Of Literacy Disorders** (PWL) Sem. SS. Lecture 4 times per week for 100 minutes for 4 weeks. Credit 2.

An introduction to the characteristics, definitions, etiologies, and assessment of literacy development in school-aged children (4-18 years of age). Emphasis is placed on the scope of practice for speech-language pathologists in the assessment and intervention process for children diagnosed with language based literacy disorders.

Area Committee B, Engineering, Sciences, and Technology (Samuel Midkiff; chair, smidkiff@purdue.edu):

Graduate Council Document 19-33a, **CE 59601, Entrepreneurship And Business Strategy In Engineering** (PWL) Sem. 1. Lecture 3 times per week for 150 minutes. Credit 3.

This course offers students the opportunity to learn and apply the core skills required to build and grow engineering- and technology-based businesses through lecture, case discussions, and weekly activities tied to a semester-long team project. Course content includes market analysis techniques to link technology attributes to opportunity and vice versa, combinatorial business design and planning methods, strategic innovation theories, competitive analysis, methods of emergent strategy and risk mitigation, as well as examination of team building, firm influence and navigation, and organizational design principles.

Emphasis throughout is placed on the implications of research and development uncertainty, long-lifecycle economics, and the management of subcontracts and multi-disciplinary teams often encountered when developing and delivering complex engineering outputs. Case studies are used to contrast the challenges faced when creating new businesses (entrepreneurial) with those encountered in attempts to grow an existing enterprise (intrapreneurial). Coursework and project activities also facilitate development of business acumen, and skill building in conceptual thinking, synthesis, and persuasive communication. This course is particularly relevant for engineering students intending to progress into managerial roles in technology or R&D driven organizations.

This course can be counted toward the College of Engineering Minor in Innovation and Transformational Change and the Burton D. Morgan Center for Entrepreneurship (BDMCE) Certificate in Entrepreneurship and Innovation.

Graduate Council Document 19-33b, **CE 59801, Breakthrough Thinking For Complex Challenges Engineering** (PWL) Sem. 1. Lecture 3 times per week for 150 minutes. Credit 3.

This course helps students learn and effectively employ high-impact design principles and structured problem solving methods to address complex multi-stakeholder socio-technical challenges. Case discussions of historical and contemporary high impact solutions to complex challenges are used to introduce techniques to frame problems, structure ambiguity, intentionally design non-incremental solutions, and communicate, trial, and iterate solutions to drive adoption and multifaceted sustainability. Techniques are drawn from multiple schools of thought such as business, design, engineering, and the social sciences. Over the course of the term, multidisciplinary student teams directly apply cumulative learning to address a real-world complex societal challenge in close collaboration with a partner organization in an experiential learning format.

The course can be counted toward the College of Engineering Minor in Innovation and Transformational Change and the Burton D. Morgan Center for Entrepreneurship (BDMCE) Certificate in Entrepreneurship and Innovation. Typically offered Fall.

Graduate Council Document 19-1e, **CGT 54400, Animation History, Technology And Technique** (PWL) Sem. 1 and 2. Lecture 1 time per week for 100 minutes and Lab 1 time week for 100 minutes. Credit 3.

This course traces the history of animation by reviewing the evolution of animation technology and the nexus between these technologies, production practices and crafts and the resulting styles, movements and genres of animation. The course reviews major technological developments of the 20th century that have impacted commercial animation production, as well as lesser known independent studios and artists, fringe technologies and sub genres. The course culminates with a consideration of current animation technology and the limits and opportunities it creates. Typically offered Fall Spring.

<u>Area Committee C: Chemistry, Engineering, and Physical Sciences, Chair to be determined):</u>

Graduate Council Document 19-27a, **ABE 51100, Drug Development** (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 100 minutes. Recitation 1 time week for 50 minutes. Distance. Credit 3.

A review of drug discovery and drug development, with emphasis on the regulatory aspects of these activities. Animal preclinical research and human clinical research are discussed in detail. In addition, the process for the assembly of an IND and NDA is discussed along with the Phases (I,II,III) of human clinical trials. The CMC (chemistry manufacturing and control) aspects of drug

development are presented along with ICH documents and manufacturing process analytical technologies. The course concludes with a brief review of international regulatory issues and patents.

Area Committee D, Humanities and Social Sciences (Manushag (Nush) Powell, chair; mnpowell@purdue.edu):

Graduate Council Document 19-29a, **ANTH 52300, GIS For Humanities And Social Science Research** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3.

This course will introduce students the skills of spatial thinking, basic functions of Geography Information Systems (GIS), and spatial research methods that are most relevant to humanities and social science. The course will start with an introduction to basic GIS concepts and technology, then move onto GIS applications during the research process, including spatial research design, data acquisition, management, visualization, and spatial analytical techniques. Practical work will be introduced and completed using ESRI ArcGIS Pro software. Typically offered Fall Spring Summer.

Graduate Council Document 19-32a, **COM 65500, Health Advocacy** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

This course considers how federal, state, and local policy influence health status and health improvement. Through this course students gain an understanding of the role of health communication campaigns in health advocacy efforts. To engage their understanding, students will apply an advocacy campaign model to address a relevant health issue.

Graduate Council Document 19-30a, **POL 53100, Terrorism And WMD Threat Assessment** (PWL) Sem. 1 and 2. SS. Lecture 3 times per week for 50 minutes. Credit 3.

"Terrorism and WMD threat assessment" is designed to teach students how to analyze and assess the threats terrorist organizations present in the area of nuclear and radiological security and weapons of mass destruction more generally. The goal of this class is to enable students to identify, prioritize, and assess terrorist threats and propose appropriate, proportional, and cost-effective counter-measures. Typically offered Fall Spring Summer.

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

Graduate Council Document 19-28a, **HTM 51100, Hospitality Business Law and Risk Management** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

This course provides an overview and analysis of the legal aspects of managing a hospitality and tourism business. Risk management principles will be utilized to develop liability mitigation plans. Discussion board and case studies will be utilized to facilitate students' understanding and application of legal concepts for managing and owning businesses. Topics covered include: the rights and responsibilities of hospitality businesses and owners in the areas of civil rights, employment law, negligence, contract law, relationships with guests and others, licensing, real estate law, and product liability; the principles of risk management; and the fundamentals of business insurance.

Graduate Council Document 19-28b, **HTM 53600, Advanced Service Management in Hospitality and Tourism** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

Approximately two-thirds of U.S. economic activity resides in the service sector. Subsequently, service firms' foci on the needs of their customers are rewarded by positive customer outcomes such as behavioral loyalty and positive word of mouth. This course explores and informs the design, management, and innovative service strategies of firms who operate in the service sector through the theoretical and empirical services management literature.

Graduate Council Document 19-28c, **HTM 54200, Strategic Revenue Management in the Hospitality Industry** (PWL) Sem. 1 and 2. SS. Distance. Credit 3. Prerequisite: HTM 50300.

In this course, we will treat revenue management as a strategic platform for maximizing property-wide incomes, thus property value. The course is designed to provide students the theoretical foundation, tactical tools, and practical applications of revenue management. At the end of the course, students should be able to identify the problems and challenges during the implementation of revenue management systems and anticipates future trends and prospects.

Graduate Council Document 19-28d, **HTM 59500, Applied Management Concept** (PWL) Sem. 1 and 2. SS. Distance. Credit 4.

In this capstone course students integrate their knowledge with concepts and skills learned from previous coursework. Students will examine and deliberate executive-level hospitality and tourism concepts. They shall create an innovative project to address the micro and macro variables of an industry problem, gap, or challenge in Hospitality and Tourism Management (HTM) that synthesizes analytical, critical thinking, business, strategic, and operational hospitality and tourism management skills. Students shall conduct applied management research, access and gather plan-specific information, and construct both hospitality-standardized written and presentation versions of the project.