PURDUE UNIVERSITY
GRADUATE SCHOOL

Minutes of the Graduate Council Meeting
November 16, 2017
1:30 p.m.

Third Meeting
Room 279
STEW

PRESENT: Linda J. Mason, interim chair; Council Members, Thomas W. Atkinson, Ryan A. Cabot,
Natalie J. Carroll, Kuan-Chou Chen, David S. Cochran, Joy L. Colwell,
Michael J. Connolly, Marius D. Dadarlat, Brian R. Dineen, Melissa M. Franks,
Jonathan M. Harbor, Singe E. Kastberg, David B. Klenosky, Michael C. Loui,
Marcela Martinez, Susan M. Mendrysa, James L. Mohler, James L. Mullins,
Manushag (Nush) Powell, Jerry P. Ross, Paul Salama, David G. Skalnik,
Carol S. Sternberger, Candiss B. Vibbert (Provost's Representative), Jun Xie,
Yan Ping Xin, Mohammad Zahraee

APOLOGIES FOR ABSENCE RECEIVED FROM: William (Bart) Collins, Lucy M. Flesch,
Takashi Hibiki, Maricel A. Lawrence, Nancy Pelaez, Melanie Morgan, Chong Xiang

ABSENCES: Christopher R. Agnew, Janice S. Blum, Carlos M. Corvalan, (Vincent) Jo Davisson,
Mary E. Johnson, Samuel P. Midkiff, Steven Son

GUESTS: Debbie Fellure, Audeen Fentiman, Colleen Gabauer, Jamie Linville, Mark Schuver,
Brittany Wright, Stephanie Zywicki

I.   MINUTES
     The minutes of the October 19, 2017, Graduate Council meeting were approved as
     presented.

II. DEANS REMARKS AND REPORTS

     a) Dr. Linda Mason gave an update on the improvements in the Graduate School. Last month
        Dr. Mason stated that the major reconstruction in the way the Graduate School operates is
        going well. A status report was presented to the Provost with over a hundred changes in
        place. The report contained fifteen pages. Dr. Mason will be meeting with the Provost to
        discuss the changes with a final report that will be going out for the public to view.

Dr. Mason noted that the Graduate School is continuing to make improvements and several items for discussion will be brought before the Graduate Council in the following months to obtain their input.

Dr. Mason asked the council members to start thinking about ideas to propose, regarding positive changes in graduate education. They should note where they think graduate education is going in their disciplines in the next five to fifteen years. She is interested in knowing what big things are on the horizon. Dr. Mason noted that instead of a regular thesis research that would be turned in with a manuscript, there could be a performance in the Arts area, or a project in the Engineering area. She asked how that may change the professional degrees and degree programs with a thesis or dissertation. She would like to get feedback from the members on how the system might need to change to adapt to new ways of completing the final work in a graduate program.

Dr. Mason noted that we are looking at the future and having these discussions now so that we can be prepared for students that will be admitted in five to ten years. Education is changing the way that students move forward in their careers and what employers are asking for is changing. She is interested in what each discipline might consider and how they see it being implemented. As we move forward, within the next term, we will have a Graduate Council Task Force assembled to collect ideas and look at how we need to proceed to accomplish this new initiative.

b) Dr. Mason discussed the tax legislation being considered by the United States senate today which will effect graduate education. She noted that the University has been active within our governmental relations. Dr. Mason noted that information has been provided to the council from the Association of Public & Land-Grant Universities (APLU) and by the Council of Graduate Schools (CGS) with data responses. Dr. Mason noted that she has contacted her government representative and she encourages everyone to do the same. She has language for them to use (if needed) that has been provided by the APLU and CGS.

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

d) 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. PRESENTATION

Dr. James Mohler gave a presentation on the tax legislation being considered by the Senate and the impact of the proposed income tax change on graduate students. Dr. Mohler noted that currently graduate students are not taxed on their tuition waivers and they are only taxed on their stipends. The proposed house tax plan would begin taxing students on both their stipends and waivers.

Dr. Mohler noted that the Lifetime Learning Credit and Hope Scholarship, the student loan interest deduction, and the elimination of tax-free status of employer tuition reimbursements would be eliminated.

IV. <u>AREA COMMITTEE REPORTS</u> (Area Committee Chairs)
Graduate Council Document 17-H, Graduate Council Documents Recommended
for Approval:

<u>Area Committee A, Behavioral Sciences (Yan Ping Xin, yxin@purdue.edu)</u>:
Graduate Council Document 17-33a. CGT 56200, Cognition & Human-Computer Interaction
(PWL)
Graduate Council Document 17-31a, ITS 55100, Principles of Information Assurance
(PNW-Hammond)
Graduate Council Document 17-38a. TCM 54000, Advanced Managing Document Quality
(IUPUI)

Dr. Yan Ping Xin presented three courses for consideration. The courses were approved
by the council, upon a motion by Dr. Xin.

<u>Area Committee C, Engineering, Chemistry, and Physical Sciences (Lucy Flesch,
lmflesch@purdue.edu)</u>:
Graduate Council Document 17-29k, CS 52300, Social, Economic, and Legal Aspects of
Security (PWL)
Graduate Council Document 17-29l, CS 57700, Natural Language Processing (PWL)

Due to the unexpected absence of Chair, Dr. Lucy Flesch, Dr. James Mohler presented
two courses for consideration. The courses were approved by the council, upon a motion.

<u>Area Committee F, Management Sciences (Jun Xie, Chair; junxie@purdue.edu)</u>:
Graduate Council Document 17-32a. AGEC 53200, World Food Problems (PWL)

Dr. Jun Xie presented one course for consideration. The course was approved
by the council, upon a motion by Dr. Xie.

<u>Area Committee A, Behavioral Sciences (Yan Ping Xin, chair; yxin@purdue.edu)</u>:

Graduate Council Document 17-17a, Proposal for a Graduate Certificate in Managing
Information Technology Projects, Department of Computer and Information Technology,
Purdue Polytechnic Institute (PWL)

Graduate Council Document 17-35a, Graduate Certificate in Qualitative Research, submitted
by the Department of Curriculum & Instruction, College of Education, (PWL)

Dr. Yan Ping Xin presented two graduate certificates for consideration. The certificates were
approved by the council, upon a motion by Dr. Xin.

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

Taylor Bailey, Ph.D. in the Department of Comparative Pathobiology in the College of Veterinary Medicine, Acting Vice President for Public Relations for Purdue Graduate Student Government (PGSG) and the PGSG Drafting Committee for graduate students Rights and Responsibilities presented the draft for *The Graduate Student Bill of Rights and Responsibilities (see Appendix B)*.

VI. NEW BUSINESS

a) Dr. Carol Sternberger presented the Purdue Fort Wayne Fall 2017 Enrollment Report. The complete report is posted on the Graduate School website. (http://www.purdue.edu/gradschool/faculty/enrollment.html)

b) Dr. Audeen Fentiman, Crowley Family Professor in Engineering Education noted that the College of Engineering and the Krannert School of Management would like to propose a Concurrent Master of Science in Engineering (M.S.E. or specific Engineering master's) and a Master of Business Administration (M.B.A.). Dr. Fentiman noted that in order to establish this concurrent degree, they have two requests related to Graduate School policy.

- The first request is that they be allowed to use existing guidelines for Combined Degree course/credit sharing in their Concurrent Degree proposal since there is no current policy.
- The second request is for a waiver of the policy stated in the August 2017 Professional Master's Program Guidelines that "Students enrolled in a Professional Master's Degree – Residential (PMD-R) / Professional Master's Degree – Digital (PMD-D) are not eligible to pursue another graduate or undergraduate degree while pursing the professional master's degree."

Dr. James Mohler noted that Combined Degrees are administratively approved because they are two existing (approved) degrees. All that is being asked at this time is the approval of the waivers. If the waivers are approved, Dr. Fentiman will submit a full concurrent degree proposal on behalf of Engineering and Management. The full proposal may be administratively approved. There is no Concurrent policy in place at this time, so the best guide we have is the Combined. In the future, a Concurrent Degree policy will be drafted for the Council's consideration to be added to the policy manual. Dr. Mohler noted that at the beginning of the year Dean Mason talked about being more innovative and more flexible within the programs and this is a good example.

The request for the two waivers was approved by the council, upon a motion by Natalie Carroll to apply the Combined Degree perimeters to a Concurrent Degree and to the Professional Master's guidelines.

VI. CLOSING REMARKS AND ADJOURNMENT

The council meeting was adjourned by Dr. Mason at 2:43 p.m.

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

PENDING DOCUMENTS

(November 16, 2017)

BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE

Area Committee A, Behavioral Sciences (Yan Ping Xin, chair; yxin@purdue.edu):
Graduate Council Document 17-33a. **CGT 56200, Cognition & Human-Computer Interaction (PWL)**
Graduate Council Document 17-31a, **ITS 55100, Principles of Information Assurance (PNW-Hammond)**
Graduate Council Document 17-38a. **TCM 54000, Advanced Managing Document Quality (IUPUI)**

Area Committee C, Engineering, Chemistry, and Physical Sciences (Lucy Flesch, chair: lmflesch@purdue.edu
Graduate Council Document 17-29k, **CS 52300, Social, Economic, and Legal Aspects of Security (PWL)**
Graduate Council Document 17-29l, **CS 57700, Natural Language Processing (PWL)**

 Area Committee E, Life Sciences (Natalie J. Carroll, chair; ncarroll@purdue.edu):
Graduate Council Document 17-16c. **NUR 69100, Health Care Research Methods (PWL)**

Area Committee F, Management Sciences (Jun Xie, chair; junxie@purdue.edu):
Graduate Council Document 17-32a. **AGEC 53200, World Food Problems (PWL)**
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 16-16a, **HTM 50300, Business Statistics and Quantitative Analysis in Hospitality (PWL)**

Graduate Student Bill of Rights and Responsibilities- Draft 6(TWB) 10.3.2017
PGSG Committee Chair: Mr. Taylor W. Bailey (pgsg.vp.relations@gmail.com)

Introduction

The Graduate Student Bill of Rights and Responsibilities was drafted to serve as a guideline of agreed best practices and standards that draws from and informs policy concerning graduate students at Purdue University. It suggests the fundamental norms and expectations with which graduate students, faculty, and staff can open dialogue and build a better university environment to ensure the best possible mutual success.

The Graduate Student Bill of Rights and Responsibilities aims to inform all Purdue graduate students, irrespective of their roles as students, staff, or fellows, to ensure that their time at Purdue is both enjoyable and efficacious. The rights listed here promote the commitment of Purdue to the most fundamental principles of academic freedom, equal opportunity, commitment to inclusion and diversity of perspective, discovery and research, teaching, and learning. The responsibilities listed promote diligence from graduate students to actively engage in all levels of their graduate experience. This document is not exhaustive; rather, it serves to supplement university, school or college, and department policies as they pertain to individual graduate programs.

I.   Purdue Graduate Student Rights

Article 1. Equal Educational Opportunity for Graduate Students

1.   Graduate students have a right to be informed of rights described in this document upon enrollment and to be free of reprisals for exercising them.

2.   Graduate students have the right to clear and specific written requirements for achieving an advanced degree upon admission into their graduate program including, but not limited to, course work, examinations, publication requirements, and conference attendance. Information regarding time-to-degree, availability and administration of graduate student salary, and faculty placement options should be open and accessible to currently enrolled and prospective students.

3.   Graduate students have the right to appropriate resources to successfully fulfill their research obligations.

4.   Graduate students have a right to respectful mentoring and advising relationships with faculty and all members of their graduate committee and to evaluation by their committee in accordance with fair procedures in matters of continuation within their program, based solely on the individual graduate student's academic and professional performance.

5.   Graduate students have a right and should be encouraged to pursue academic and professional training that is relevant to their personal career path and that will make them competitive for their career goals after the completion of their programs.

6.   Graduate students have a right to wellness resources, including programs for mental and physical well-being, to optimize their academic achievement and their contribution to the university overall.

7.   Graduate students have the right to a clearly defined grievance procedure with the graduate program manual and to seek resolution without fear of retaliation.

Article 2. Supportive and Constructive Workplace Environment for Graduate Staff

1.   Graduate staff working as administrative, professional, research, and/or teaching assistants have the right to clear and specific written job descriptions, responsibilities, and benefits (such as vacation and sick leave) that come with their appointment. This notification should occur prior to the start of employment, and staff should be immediately informed in writing of changes. Graduate staff members should understand the impact of their earnings on eligibility for student loans and salaries. Relevant university, college, department and/or program resources, including human resources and business office staff should be responsive to graduate student inquiries about their working conditions.

2.   Graduate staff have a right to appropriate, structured, and specific training to ensure that they can meet the expectation of their appointment.

3.   Graduate staff have the right to a competitive salary relative to their colleagues in comparable departments in peer institutions with consideration of cost of living for the region. Graduate salary levels should be evaluated on a regular basis by colleges and departments.

4.   Graduate staff have a right to an accurate written description of the availability, sources, and conditions for the continuity of financial and resource support for a graduate staff appointment, and immediate notice of any changes impacting continued support. If the conditions for employment change, contract obligations by both parties should meet all obligations. Only if the graduate staff leaves the position prior to the employment manual minimums, should any obligation of tuition repayment beyond the graduate staff fee be executed.

5.   Graduate staff have a right to health and family medical leave benefits that will meet the needs of graduate staff, their dependents and spouse, and to participate in the process for changing benefit coverages, plans, and rates.

6.   Graduate staff have the right to be informed of a clearly defined workplace grievance procedure and to seek resolution without retaliation.

Article 3. Mentoring, Advising, and Performance Feedback

1.   Graduate students have a right to consultation on all requirements related to their degree program. Graduate students should receive regular and constructive feedback and guidance concerning their performance on a mutually agreeable schedule from all members of their graduate committee. Requests for meetings by either party should be met in a timely fashion, and feedback should be provided in writing when requested.

2.   In cases where the student's major professor departs from the university after the student's coursework and dissertation has begun, graduate students have the right to change their major professor(s) and the right to alternative supervision. If a graduate program is to be discontinued, provisions shall be made for students already in the program to complete their course of study.

3.   Graduate students have a right to prompt notification of any concern of their major professor, graduate committee, department, or the university related to their performance that may jeopardize their continued participation in their graduate program. Graduate students have the right to receive a

fair opportunity to improve performance and address deficiencies subject to a reasonable, mutually agreed upon set of guidelines and timetable.

4.   Graduate students have a right to question and refuse tasks that are outside of their academic programs or professional development, unless these tasks are explicitly established within the requirements of their program.

5.   Graduate students have a right to full confidentiality in their communication with staff, faculty, and administrators, unless required by Title IX or other federal law.

Article 4. Research Contribution and Authorship

Graduate students have a right to fair treatment and attribution, including authorship, for significant contribution to ideas and work performed on faculty-sponsored research. Responsibilities and rights on research projects, including authorship positions consistent with norms and standards within the respective discipline, should be explicitly explained and understood before the project is undertaken and communicated throughout the entire project duration.

Article 5. Participation in Governance

1.   Graduate students have the right to consultation in the decision-making process of all departments and graduate programs when graduate students may be affected.

2.   Graduate students have the right to representation in all university committees, without fear of retaliation and with voting privileges when appropriate, when graduate students may be affected. Selection of eligible graduate students to serve on university committees should be made in consultation with the Purdue Graduate Student Government.

II.   Purdue Graduate Student Responsibilities

Article 1. Graduate Student Engagement with the University

1.   Graduate students are responsible to understand the responsibilities that are described in this document and the implications to their time at spent at university.

2.   Graduate students are responsible to devote appropriate time and diligence to carry out their duties in a conscientious and timely manner, have the responsibility to inform the university of any changes or circumstances that would prevent them from carrying out these obligations, and to do their best to ensure stability for other students, faculty, programs, and departments with whom and wherein they work.

3.   Graduate students are responsible for informing their major professor immediately of special circumstances that may preclude completion of their work. These circumstances could include, but are not limited to, the unique nature of the research, dire financial situations, civic obligations, family obligations, and religious obligations.

4.   Graduate students are responsible for attending class and completing all assignments in accordance with the expectations established by their instructors and programs of study.

5.   Graduate students are responsible to take the initiative in seeking information that promote their understanding of the academic requirements and the financial particulars of their graduate program and to be receptive of information and updates provided to them through multiple forms of communication, including Purdue e-mail.

6.   Graduate students are responsible for informing the university of changes in address, phone number, enrollment status, or any other circumstance which could affect satisfactory progress in their program or financial aid and assistantship awards.

7.   Graduate students are encouraged to provide service to and actively participate in the governance of their program, their department, school or college, and the university community, and they should endeavor to contribute to the administration and ongoing improvement of their graduate program, the graduate student government, and the university.

Article 2. Purdue Graduate Staff Responsibilities

1.   Graduate staff have a responsibility to maintain regular and open communication with their employer, to ensure mutual understanding of the expectations of their appointment, to maintain integrity in their research activities, and to perform their duties as outlined and in accordance with institutional guidelines and policies.

2.   Graduate staff with teaching appointments have a responsibility to uphold the highest level of academic integrity and diligence in their teaching practices.

3.   Graduate staff have a responsibility to understand their role and due diligence in fostering professional relationships with their advisors and university personnel.

III. Amendments to the Bill of Rights

Any amendments to the Graduate Student Bill of Rights and Responsibilities must receive endorsement from the Purdue Graduate Student Senate and the University Senate.

NEW DOCUMENTS RECEIVED
(After the November 16, 2017 Graduate Council Meeting)

Area Committee A, Behavioral Sciences (Yan Ping Xin, chair; yxin@purdue.edu):

Graduate Council Document 17-47a, **AT 50700,** Quantitative Research Methodologies in Transportation (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: Undergraduate-level statistics course.

   This course provides an introduction to business statistics with a specific focus on data analyses and managerial decision making in the transportation industry. Topics include descriptive statistics, probability models, estimation, hypothesis testing, and regression analysis. Students use software to perform their own analyses.

Graduate Council Document 17-47b, **AT 53300, Aviation Graduate Professional Practice Internship** (PWL) Sem. 1 and 2. SS. Research. Credit 1 to 3**.** Prerequisites: Completion of one term of graduate studies and the instructor will validate that the student has an offer letter from an approved company.

   This course involves a practical internship experience within the aviation industry that provides exposure to the roles and duties commensurate with the student's graduate program focus. Permission of assigned graduate chair is required.

Graduate Council Document 17-47c, **AT 54000 (Upgrade to 64000), Aviation and Aerospace Sustainability** (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: STAT 30100 or STAT 31100 or STAT 50100 or STAT 51100 or IT 50700 or an instructor-approved statistical foundations course. Proficiency in statistical foundations is required to understand and evaluate environmental, economic and social sustainability data, information and methods presented in this course.

   This course explores sustainability as applied to aviation and aerospace industries and agencies, both in the private sector and public sector. Emphasis is placed on understanding aviation and aerospace sustainability academic literature and on connecting the global and national policies that lead to the regulations and practices. Aviation sustainability is comprised of multiple areas of impact such as economic, environmental, operational, and social. Students develop an understanding of existing sustainability assessment frameworks such as GRI that have general sustainability assessments along with specialized aviation industry frameworks. Using a multiple attribute analysis approach, students develop metrics and analyze the potential impact of sustainability initiatives in the aviation and aerospace industry.

Graduate Council Document 17-47e, **AT 57500 (Upgrade to 67500), Aviation Safety Program Development** (PWL) Sem. 1 and 2. SS. Lecture 1 time per week for 150 minutes. Distance. Credit 3. Prerequisites: Admission to graduate studies and permission of the instructor.

   This course is designed to provide graduate students with essential information and practical activities necessary to develop and manage effective and comprehensive safety programs for a wide variety of aviation operations. Students will conduct safety research, analyze data, and make presentations based on developed safety systems.

Graduate Council Document 17-47d, **AT 65900, Airport and Transportation Sustainability** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 75 minutes. Credit 3. Prerequisites: Successful completion of at least one statistics course covering descriptive and inferential statistics, an airport management course (e.g., AT 35900) and admission to doctoral program or permission of the instructor.

    AT 65900 Airport and Transportation Sustainability is a doctoral format course about the methods and practice of sustainability for airports and transportation. Sustainability in planning, design, construction and operation of airports and transportation facilities and infrastructure are addressed.

Graduate Council Document 17-45a, **BCM 57200, Construction Research Fundamentals** (PWL) Sem. 1 and 2. Lecture 1 time per week for 50 minutes. Credit 1. Prerequisites: A minimum of one credit course providing introduction to research-based graduate study, a research seminar or previous thesis based degree.

    Construction Research Fundamentals focuses on helping students to develop their thesis research through lecture and faculty guided individual or group activities. Using common research methodologies for construction research as a theme for discussion each week, students work together to build a better understanding of how to approach thesis research for their topic of interest and research topics chosen by other students in the class.

Graduate Council Document 17-33b, **CGT 67000, Applications in Visual Analytics** (PWL) Sem. 1 and 1 and 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.

    Visual Analytics (VA) provides a fast way for people to make sense of large number of data, and has applications in many sectors. This course will introduce Visual Analytics through foundational theories and a broad range of techniques and tools, focusing on using visualization methods to reason and solve complex problems in a wide variety of applications. Visual analytics is the science of analytical reasoning facilitated by interactive visual interfaces that synthesize human and computational ability to attack large complex problems. It is concerned with analytical reasoning, interaction, data transformations, data visualization, analytic reporting, and technology transition. While the different visual analytics applications share common theories and strategies, each of them has its unique data composition, visual representations, and analytical needs and strategies. Through survey and study a broad range of visual analytics applications, students will be able to apply visual analytics on their own applications, analyze and break down a complex analytical problem into proper components and steps, evaluate different visual analytic techniques and strategies, and finally design and develop an effective visual analytics solution toward the problem.

Graduate Council Document 17-49a, **CNIT 53000, Information Technology Business Analysis** (PWL) Sem. 1 and 2. SS. Distance. Credit 3. Prerequisites: For residential and online graduate students, there is no course prerequisite other than being in good standing in a grade program related to information technology. Accordingly, the coursed is open to graduate students in CIT (=CNIT), TECH, CS, CGT, and MGMT – other graduate programs by permission. For undergraduate students, Senior standing and a GPS > 3.00. Informally, the instructor expects students to be reasonably proficient with a word processor and spreadsheet (no specific technology).

    This course introduces the application of knowledge, skills, tools, and techniques that business analysts use to solve business problems related to information technology projects. Special emphasis is placed on learning and applying the concepts of enterprise analysis, business analysis planning, stakeholder management, requirements management, and solution evaluation.

    The course is designed based on the principles and competencies prescribed by the International Institute of Business Analysts (IIBA) and the Project Management Institute's BABOKs (Business Analysis Body of Knowledge).

Graduate Council Document 17-49b, **CNIT 53100, IT Requirements Analysis & Modeling** (PWL) Sem.1 and 2. SS. Distance. Credit 3. Prerequisites: For residential graduate students, there is no course prerequisite other than being in good standing in a graduate program related to information technology. Accordingly, the course is open to graduate students in CIT (=CNIT), TECH, CS, CGT, and MGMT – other graduate programs by permission. For undergraduate students, CNIT 48000 and a GPS > 3.00. All students registered in the Information Technology Project Management; and a GPA > 3.00. All students registered in the Information Technology Business Analysis online distance based MS degree must have previously taken the CIT Business Analysis Essentials course or possess a Business Analysis certification through IIBA or PMI. Informally, the instructor expects students to be reasonably proficient with a word processor and spreadsheet (no specific technology).

This course introduces and develops the skills that business analysts will need to solve business problems and effectively model and analyze stakeholder requirements in order to define workable solutions and effective communicate customer needs.

The course is designed based on the principles and competencies prescribed by the Project Management Institute's BABOK (Business Analysis Body of Knowledge) and the book Visual Models for Software Requirements by Joy Beatty.

Graduate Council Document 17-43a, **CSR 60300, Advanced Writing for Consumer and Public Health** (PWL) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: Consumer Health and Public Health students only.

This course is designed to focus on one of the most essential professional and academic skills: writing. This course will provide resources and support for students to achieve goals in composing public health research-based manuscripts for publication and presentation, skillfully crafting grant applications for internal and external funding, and exploring publishing beyond academic journals.

Graduate Council Document 17-43b, **CSR 62000, Consumer Health Theories** (PWL) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3. Prerequisites: Graduate students.

This course serves as an advanced theory course for understanding consumer health. It introduces students to important well understood theories and concepts, such as, political economy of health and critical race theory, and allows students to foster engagement with literature that will lead to further their understanding of causes of consumer health disparities from the consumer decision making point of view.

Graduate Council Document 17-48a, **ENGT 50700, Fundamentals of Collaborative Leadership and Agile Strategy for Engineering Technology** (PWL) Sem. 1 and 2. SS. Lecture 2 times per week for 193 minutes for 7 weeks. Credit 3.

ENGT 50700 course will provide students with a foundation in collaborative leadership and agile strategy. The course brings together theories and insights from a variety of disciplines including engineering, management, psychology, and social science. Increasingly manufacturing management is being called upon to apply their technical skills in collaborative environments that cut across organizational units and inter-organizational boundaries. Understanding how to design and guide collaborations and apply agile approaches for meeting strategic objectives is an important skill-set and knowledge-base in the 21st Century economy, defined more by open networks than the ridged hierarchies of the past.

Area Committee C, Engineering, Chemistry, and Physical Sciences (Lucy Flesch, chair: lmflesch@purdue.edu

Graduate Council Document 17-29m, **CS 59700, Graduate Professional Practice** (PWL) Sem. 1 and 2. SS. Experiential. Credit 0.

 Internship experience to complement the student's academic coursework and help prepare the student for employment in computer science. The student must have completed at least one semester as a May not be taken in successive semesters.

 The student must present a letter from the proposed employer describing to a reasonable extent the work to be undertaken and find a member of the Computer Science Graduate Faculty to be the instructor. Permission of the instructor required.

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

Graduate Council Document 18-3a, **COM 64011, Seminar in Advertising** (PWL) Sem. 1 and 2. SS. Distance. Credit 3.

 This course provides an overview of the strategic planning process for advertising including identifying the target audience, determining a positioning strategy and developing a communication media strategy. The course will provide information on theory and best practices that inform the planning and implementation process for successful advertising campaigns.

Area Committee E: Life Sciences, Natalie J. Carroll, chair; ncarroll@purdue.edu):

Graduate Council Document 18-1a, **BIOL 62100, Biology Education Academic Proposal or Manuscript Writing** (PWL) Sem. 1. Lecture 1 time per week for 50 minutes. Credit 1**.**

 This course is designed to help graduate students increase their academic writing skills. Students in this course will learn how to write conference proposals. Research articles, and grant proposals. Students will also learn elements of successful writing in science and education.

Graduate Council Document 17-50a, **FNR 52900, Disease Ecology** (PWL) Sem. 1. Lecture 2 times per week for 75 minutes. Credit 3**.**

 Study of the ecological and evolutionary complexity inherent to host-pathogen interactions. Includes case studies from a diverse array of systems, including plants, animals, aquatic and terrestrial systems. Emphasis is on the interactions between multiple hosts and pathogens within complex, dynamic environments. Introduction to parasite and pathogen diversity, host-pathogen coevolution, community ecology and the importance of pathogens in conservation and management.

Area Committee F, Management Sciences (Jun Xie, Chair; junxie@purdue.edu)

Graduate Council Document 17-13k, **MGMT 56800, Supply Chain Analytics** (PWL) Sem. 1 and 2. Lecture 2 times per week for 90 minutes for 8 weeks. Credit 2. Prerequisites: MGMT 66000 or equivalent course) and MGMT 67000 (or equivalent course).

 Supply Chain Analytics focuses on data-driven and rigorous decision making in supply chain management. It is a complete problem solving and decision making process, and integrates a broad set of analytical methodologies that enables the creation of business value.

GRADUATE CERTIFICATE(S):

Area Committee A, Behavioral Sciences (Yan Ping Xin, chair; yxin@purdue.edu):

Graduate Council Document 17-36a, **Graduate Certificate in Executive Construction Management Technology,** Submitted by the Department of Construction Management Technology in the Polytechnic Institute, PWL

*Graduate Council Document 17-46a***, Graduate Certificate in Educational Leadership,** School of Education, PFW

Graduate Council Document 17-44a, **Graduate Certificate in Applied Data Analytics in Technology,** Submitted by the Department of Computer and Information Technology in the Polytechnic Institute, PWL

Graduate Council Document 18-2a, **Graduate Certificate in Aviation Safety Management,** Submitted by the School of Aviation and Transportation Technology, in the Polytechnic Institute, PWL

Area Committee C, Engineering, Chemistry, and Physical Sciences (Lucy Flesch, chair: lmflesch@purdue.edu

Graduate Council Document 17-37a, **Graduate Certificate in Systems,** College of Engineering, PWL

DOCTORIAL DEGREE:

Area Committee A, Behavioral Sciences (Yan Ping Xin, chair; yxin@purdue.edu):

Graduate Council Document 17-19a, **Doctor of Technology** proposal submitted by the Purdue Polytechnic, PWL