# PURDUE UNIVERSITY GRADUATE SCHOOL

Minutes of the Graduate Council Meeting February 20, 2020 1:30 p.m.

Fifth Meeting Room 279 STEW

PRESENT: Linda J. Mason, chair, Council Members, Dulcy M. Abraham, Christopher R. Agnew, Blake A. Allan, Thomas W. Atkinson, Ryan A. Cabot, Kuan-Chou Chen, William (Bart) Collins, Duane D. Dunlap, Emad Elwakil, Keith B. Gehres, Margaret Gitau, Richard H. Grant, Patricia Hart, Athena Kennedy, James L. Mohler, John A. Morgan, Melanie Morgan, Paul F. Muzikar, Tina L. Payne, Manushag (Nush) Powell, Paul Salama, Abraham Schwab, John A. Springer, Rebecca H. Stankowski, Jill Suitor, Joseph D. Thomas, Candiss B. Vibbert (Provost's Representative), Eric Waltenburg, Nicole J. Widmar, Yoon Yeo, Chenn Zhou, Daoguo Zhou

APOLOGIES FOR ABSENCE RECEIVED FROM: Taylor W. Bailey, Christopher K. Belous, G. Jonathan Day, Signe E. Kastberg, Timothy B. Lescun, William McCartney, Beth McNeil, David G. Skalnik, Anson Soderbery

ABSENCES: Christopher K. Belous, Janice S. Blum, Rita A. Burrell, David S. Cochran, Zhan Pang, Mitchell L. Springer, Xavier M. Tricoche,

GUESTS: Hossein Ebrahiminejad, Ayrielle Espinosa, Debbie Fellure, Donna Ferullo, Chris Ladisch,
Rick Mattes, Emilie Maurais, Korena Vawter

#### I. MINUTES

The minutes of the January 23, 2020, Graduate Council meeting were approved as presented.

#### II. DEANS REMARKS AND REPORTS

a. Dr. James Mohler, Deputy Chair noted one of the most obvious things that we are all dealing with is relative to our students from China and the impact that the closure of borders has

had, the flight interruptions, the testing of the GRE, TOEFL and the other types of exams. Dr. Mohler noted that there are conversations occurring at the highest levels in trying to figure out what is the impact. The first thing was trying to get students that are there currently, whether they be on Study Abroad or whether they be Chinese nationals in figuring out what do we do in the scenario. The University has done the best it could and the Graduate School has noticed some holes in trying to be able to figure out in a moment's notice who is where. When we talk about students that could be on research leave, students that could be in Research in Absentia, students that could be Change of Duty Station and those who may be gone and we do not know that. Dr. Mohler noted that the Graduate School is aware these are areas that we need to improve on. Dr. Mohler also noted that the Graduate School is talking with various colleges about fast tracking some opportunities for students, particularly those who are finishing up a bachelor's degree and potentially continuing into something. These students are the ones who are caught in this nether region of not being able to get home or if they get home, they may not be able to get back. Dr. Mohler noted that it is important to extend care to the students that are being impacted by this. Dr. Mohler also noted that we are open to any creative ideas and solutions. We realize this is not a contingency that was planned for, but will be planned for from this point on. Dr. Mohler noted that Council members could contact Dean Mason regarding any concerns that programs may have.

b. Dr. Melanie Morgan noted that if an Underrepresented Minority (URM) student is admitted to the Bridge Program at the West Lafayette campus in the summer, the eight-week program will bring them to campus early and pays for housing, pays a stipend and they are able to start on their research with the faculty member. Dr. Morgan noted the data shows that it helps

the students form a community early. The Bridge Program is open and we continue to support

these students through the first two years of their program with support in different types of enrichment activities. Dr. Morgan encouraged the Graduate Council members to look at this if they have any students who would benefit from the program. There is a cost sharing at \$5000 for the department or the college, and the Graduate School pays for the other half.

### III. AREA COMMITTEE REPORTS (Area Committee Chairs)

*Graduate Council Document 20B*, Graduate Council Documents Recommended for Approval:

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

Graduate Council Document 19-12c, ASEC 54100, Program Development In School-Based-Agricultural Education (PWL)

Graduate Council Document 19-12d, ASEC 54600, Communication And Issues Engagement For Agricultural Professionals (PWL)

Graduate Council Document 19-12e, ASEC 54800, Communicating Science To The Public (PWL)

Graduate Council Document 19-59b, EDPS 55200, Basic Concepts Of Applied Behavior Analysis (PWL)

Graduate Council Document 20-10a, **PSY 61601**, **Neurobiology of Brain Disorders** (PWL)

Graduate Council Document 20-11a, SLHS 50401, The Auditory Periphery (PWL)

Due to the absence of Chair, Dr. Signe Kastberg, Dr. Blake Allan presented six courses for consideration. The courses were approved by the council, upon a motion by Dr. Allan.

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

Graduate Council Document 19-13b, BCHM 52100, Comparative Genomics (PWL) Graduate Council Document 19-11b, BME 51100, Biomedical Signal Processing (PWL) Graduate Council Document 19-11c, BME 68300, Polymers In Biomedical and Pharmaceutical Systems (PWL)

Dr. John Morgan presented three courses for consideration. The courses were approved by the council, upon a motion by Dr. Morgan.

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

Graduate Council Document 19-32c, COM 64600, Strategic Corporate Branding (PWL)

Graduate Council Document 19-2j, ENGL 66900, Introduction To Visual Theory and Visual Culture (PWL)

Graduate Council Document 20-9a, **HIST 56800**, **Big History: From Big Bang To The Future** (PNW)

Graduate Council Document 20-9b, **HIST 58200, Art Of History** (PNW) Graduate Council Document 19-30b, **POL 53200, Nuclear Strategy and Proliferation** (PWL)

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

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

Graduate Council Document 19-19b, FNR 58700, Advanced Spatial Ecology and GIS (PWL)

Graduate Council Document 19-67a, **HSCI 52000**, **Risk Assessment in Environmental Health** (PWL)

Graduate Council Document 19-67b, HSCI 55300, Advanced Occupational Safety Management and Culture (PWL)

Graduate Council Document 20-8a, LA 50100, Research Methods For Design Applications (PWL)

Graduate Council Document 19-41c, NUR 67400, Quality Initiatives, Leadership and Advanced Practice Nursing (PWL)

Dr. Ryan Cabot presented five courses for consideration. The courses were approved by the council, upon a motion a motion by Dr. Cabot.

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

Graduate Council Document 19-66a, AGEC 60900, Applied Welfare Analysis (PWL)

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

#### **DEGREE PROGRAMS:**

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

Graduate Council Document 20-23a, MS and Ph.D. in Public Health from the Department of Public Health (PWL)

Due to the absence of Chair, Dr. Signe Kastberg, Dr. Blake Allan presented one program for consideration. The program was approved by the council, upon a motion by Dr. Allan.

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

Hossein Ebrahiminejad, Executive Board member of the Purdue Graduate Student Government (PGSG) presented updates on the following:

- This was the first time that PGSG collaborated with Purdue Student Government (PSG) to do a cross campus Mental Health Awareness Week (MHAW). The turnout was huge, so an update will be presented at the next Graduate Council meeting.
- PGSG will be hosting this years National Association of Graduate-Professional Students (NAGPS)-Midwest Regional conference. The conference will be held at PGSC from April 3<sup>rd</sup> thru April 5<sup>th</sup>. The theme for this year's conference is deepening diversity.

## V. PRESENTATION

Christine Collins, Director International Student Services, Office of International Students and Scholars presented information regarding the 2020 Immigration update.

## Executive, Federal and State Initiatives:

Presidential Proclamation "Travel Ban 4.0";

■ Does not include students.

Presidential Proclamation "COVID-19 Travel Ban";

■ Includes everyone except very specific individuals with strong connection or purpose in the United States, such as U.S. Citizens, Lawful Permanent Residents, Diplomats and their dependents.

Department of State Public Charge Interim Final Rule;

- Does include students.
- Totality of Circumstances, Individual and/or dependents may at any time in the future become a public burden. Embassy and Port of Entry discretion.

U.S. District Court permanent nationwide injunction blocking "Days of Unlawful Presence";

• Represents a positive step for students.

Cap Subject H-1B Pre-registration Process;

• Represents a somewhat positive change for students coming off of OPT and entering the employment visa arena.

## Other Pending Initiatives:

End of Duration of Status for Students (2/2020);

• This would have a paralyzing effect on all students.

Wash-Tech judicial challenge to Optional Practical Training;

• OPT as we know it, could go away.

Entire revamp of Practical Training including CPT and casting additional lenses of scrutiny on:

- STEM OPT degrees and curricular substantiation;
- Employers who hire OPT students;
- Schools who recommend OPT;
- The curricular nature of Curricular Practical Training.

#### VI. CLOSING REMARKS AND ADJOURNMENT

- a. Dr. Linda Mason noted that the survey we did with students who are currently here were asked what were their plans are for the summer were they continuing or graduating? A large number of students from China indicated in the survey that they intend to go back to China in the Summer, and return here in the Fall. Dr. Mason noted that we want to make sure students understand the consequences if they go home and buy their ticket and leave, they may not be able to come back depending on what happens with the Coronavirus. Dr. Mason noted that our concern is that students need to understand how immigration laws and the travel ban with the Coronavirus could stop that plan and they need to be prepared for the consequences if they cannot come back to the institution. Dr. Mason noted the importance that faculty members have a discussion with their students and how this could affect their educational mission.
- b. Dr. Mason noted that the Graduate School is working on a degree with Krannert School of Management to put together a business essential program that would start this summer for students who are looking for a way to stay within the country. Undergraduates cannot get a graduate certificate to stay as a student under immigration status that is not a degree pursuit. This Master of Science would start as a certificate,
- c. Dr. Tom Atkinson discussed the 4.0 travel ban.

The council meeting was adjourned by Dr. Mohler at 2:30 p.m.

James L. Mohler, Deputy Chair Tina L. Payne, Secretary

#### **APPENDIX A**

#### PENDING DOCUMENTS

(February 2020)

## **BOLDED ITEMS ARE IN REVIEW WITH AN AREA COMMITTEE**

Area Committee A, Behavioral Sciences (Signe Kastberg; chair, skastber@purdue.edu): Graduate Council Document 19-12c, ASEC 54100, Program Development In School-Based Agricultural Education (PWL)

Graduate Council Document 19-12d, ASEC 54600, Communication And Issues Engagement For Agricultural Professionals (PWL)

Graduate Council Document 19-12e, ASEC 54800, Communicating Science To The Public (PWL)

Graduate Council Document 19-59b, EDPS 55200, Basic Concepts Of Applied Behavior Analysis (PWL)

Graduate Council Document 20-10a, PSY 61601, Neurobiology of Brain Disorders (PWL) Graduate Council Document 20-11a, SLHS 50401, The Auditory Periphery (PWL)

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

Graduate Council Document 19-62a, CNIT 52300, File Systems Forensics (PWL)
Graduate Council Document 19-62b, CNIT 52500, Mobile and Embedded Device Forensics (PWL)

Graduate Council Document 19-64a, CS 58300, Big Data Analytics in Cloud Computing (PFW)

Graduate Council Document 19-38c, CSCI 52500, Parallel Computing (IUPUI)

Graduate Council Document 19-38d, CSCI 57500, Computer Systems Security (IUPUI) Graduate Council Document 29-15f, ECE 52500, Introduction To Computer Graphics, PNW

Graduate Council Document 19-15g, ECE 56810, Design with Embedded Systems (IUPUI) Graduate Council Document 19-15a, ECE 61020, Operation of Modern Power Systems (PWL) Graduate Council Document 19-61a, ENGT 58300, Applied Engineering Statistics for Industry (PWL) (PFW)

Graduate Council Document 18-22a, IE 68500, Competitive Strategy (PWL)

Graduate Council Document 19-17d, ME 59100, Mechanical Engineering Project (IUPUI) Graduate Council Document 19-39c, MSE 67000, Atomistic View of Materials: Theory, Modeling And Simulations (PWL)

Graduate Council Document 19-65a, MSTE 57200, Vehicle Dynamics, (IUPUI) Graduate Council Document 19-65b, MSTE 57400, Advanced Vehicle Dynamics, (IUPUI) Graduate Council Document 19-65c, MSTE 58200, Motorsports Aerodynamics, (IUPUI) Graduate Council Document 19-65d, MSTE 58400, Advanced Motorsports Aerodynamics, (IUPUI)

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

Graduate Council Document 19-13b, BCHM 52100, Comparative Genomics (PWL) Graduate Council Document 19-11b, BME 51100, Biomedical Signal Processing (PWL) Graduate Council Document 19-11c, BME 68300, Polymers In Biomedical and Pharmaceutical Systems (PWL)

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

Graduate Council Document 19-32c, COM 64600, Strategic Corporate Branding (PWL) Graduate Council Document 19-2k, ENGL 55702, Modern and Contemporary American Poetry (PFW)

Graduate Council Document 19-L, ENGL 64401, Designing A Poetry Course – Using Poetry for the People (PFW)

Graduate Council Document 19-2j, ENGL 66900, Introduction To Visual Theory and Visual Culture (PWL)

Graduate Council Document 20-9a, HIST 56800, Big History: From Big Bang To The Future (PNW)

Graduate Council Document 20-9b, HIST 58200, Art Of History (PNW)

Graduate Council Document 19-30b, POL 53200, Nuclear Strategy and Proliferation (PWL)

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

Graduate Council Document 19-19b, FNR 58700, Advanced Spatial Ecology and GIS (PWL)

Graduate Council Document 19-67a, HSCI 52000, Risk Assessment in Environmental Health (PWL)

Graduate Council Document 19-67b, HSCI 55300, Advanced Occupational Safety Management and Culture (PWL)

Graduate Council Document 20-8a, LA 50100, Research Methods For Design Applications (PWL)

Graduate Council Document 19-41c, NUR 67400, Quality Initiatives, Leadership and Advanced Practice Nursing (PWL)

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

Graduate Council Document 19-66a, AGEC 60900, Applied Welfare Analysis (PWL)

#### **CERTIFICATES:**

Area Committee A, Behavioral Sciences (Signe Kastberg; chair, skastber@purdue.edu): Graduate Council Document 20-26a, Graduate Certificate in Advanced Methodologies in Behavioral, Social, and Health Sciences submitted by the Graduate School Administration (PWL)

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

Graduate Council Document 20-3a, Graduate Certificate in Cybersecurity submitted by the Department of Computer Information Technology and Graphics (PNW)

#### **MAJORS:**

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

Graduate Council Document 20-17a, Major in Corporate Training and Communication Leadership submitted by the Graduate School Administration (PWL)

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

*Graduate Council Document 20-15a*, Major in Landscape Systems and Design submitted by Horticulture and Landscape Architecture (PWL)

Graduate Council Document 20-16a, Major in Health Physics submitted by the School of Health Physics (PWL)

#### **DEGREES:**

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

Graduate Council Document 20-27a, Ph.D. in Biomedical Engineering submitted by the Department of Biomedical Engineering (IUPUI) For SITE approval only.

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

Graduate Council Document 20-4a, Master of Nuclear Engineering (M.N.E.) submitted by the School of Nuclear Engineering (PWL)

### **NEW DOCUMENTS RECEIVED**

(After the February 20, 2020 Graduate Council Meeting)

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

*Graduate Council Document 20-14c*, **EDPS 50101**, **Collaboration In Special Education** (PNW) Sem. 1 and 2. Lecture 1 time per week for 150 minutes. Credit 3.

This course is designed to help candidates construct knowledge about techniques for collaborating with families and professionals to support the needs of children/youth with disabilities. This course will facilitate the development of professional practices and relationships by exploring current research on effective methods of interaction with key stakeholders which support inclusive educational practices.

# *Graduate Council Document 20-14d*, **EDPS 50202**, **Autistic Spectrum Disorders** (PNW) Sem. 2. SS. Lecture 1 time per week for 150 minutes. Credit 3.

This course provides an overview of autism spectrum disorders, including history, etiology, characteristics, assessment, evidence-based interventions at home and school, service delivery models and alternative/complementary treatments.

# *Graduate Council Document 20-14e*, **EDPS 50303**, **Characteristics Of Students With Intense Intervention Needs** (PNW) Sem.1 and 2. Lecture 1 time per week for 150 minutes. Credit 3.

This course is focused on the learning and behavioral characteristics of students with intense intervention needs. Assessment and identification criteria used in the identification of these children are discussed. Appropriate programming and placement is also primary focus. Diagnostic definitions used for classification are explained.

# *Graduate Council Document 20-14f,* **EDPS 50404, Intervention Strategies For Students With Intense Needs** (PNW) Sem. 2. Lecture 1 time per week for 150 minutes. Credit 3.

This course provides an understanding of the interventions and teaching methods used to instruct children and students with intense special education needs. The nature of significant cognitive, emotional, behavioral, and physical disabilities, including the biological, psychological, and behavioral characteristics of various conditions are also discussed.

# Graduate Council Document 20-11b, SLHS 54401, School-Clinical Methods In Communication Disorders (PWL) Sem. 1 and 2. SS. Distance. Credit 1.

The focus of this course is on the implementation of speech, language, and hearing services with preschool to secondary (P-12) school-aged children. Students develop a working knowledge of special education law, disability law, and other resources for school-aged children.

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

# Graduate Council Document 20-30a, CNIT 60100, Applied Statistics In Information Technology (PWL) Sem. 2. Lecture 1 meeting per week for 150 minutes. Credit 3.

This course will survey the field of applied statistics in information technology. Students will gain hands-on experience running statistical analyses on samples from a variety of populations. Students will learn the process of data cleaning, data transforming/coding, identifying the appropriate statistical analyses (descriptive and inferential), as well as writing and interpreting the results. Specifically, this course will survey the following statistical approaches: correlations, t-test, analysis of variance, analysis of co-variance, factorial ANOVA, simple regression, multiple regression, logistic regression, chi-square analysis, factor analysis, and nonparametric tests. In this course, students will be able to differentiate statistical analyses and identify appropriate statistical analyses depending on the research question and variables of interest. Permission of instructor required.

## Graduate Council Document 20-29a, CS 50023, Data Engineering I (PWL) Sem. 1 and 2. SS. Distance. Credit 1.

The course introduces students to the fundamentals of Data Engineering with a focus on tools and computational techniques to gather, construct, manipulate, summarize, and visualize data sets as a means to extract knowledge from the underlying data. Python and Python libraries are used. Completion of the course will allow learners to perform basic data analysis on data sets. Experience in Python Programming and Linear Algebra is required. The course also prepares learners for additional instruction in the courses Data Engineering II and Foundations of Decision Making.

# Graduate Council Document 20-29b, CS 50024, Data Engineering II (PWL) Sem. 1 and 2. SS. Distance. Credit 1.

This course introduces students to the fundamentals of database management systems (DBMS) from a user's perspective. The principles of modeling an enterprise using Entity-Relationship diagrams and transforming the model into a relational or NoSQL database are illustrated through a range of examples. The SQL language is used to create, query, aggregate, and update a relational database. NOSQL databases and the related data models (column, graph, and document-based) are introduced. Experience in Python Programming is required.

## Graduate Council Document 20-29c, CS 50025, Foundation of Decision Making (PWL) Sem. 1 and 2. SS. Distance. Credit 1.

This course provides an overview of data science methods used for data-driven discovery, extraction of knowledge, and informed decision making. The course covers fundamental computational methods and statistical techniques used to correctly reason about uncertainty, conduct hypothesis tests, infer causal relationships, and apply and evaluate predictive models. The course highlights how sampling biases can impact fairness in decision making. Throughout, students get hands-on experience on how to make correct and explainable inferences from data. Experience in Python Programming, Probability, Statistics and Linear Algebra is required.

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

Graduate Council Document 20-31a, **BIOL 52020, Introduction To Virology** (PNW) Sem. 1 and 2. SS. Lecture 2 meetings per week for 75 minutes. Credit 3. Prerequisites: A minimum of a grade of C in BIOL 24400 and BIOL 24300. BIOL 32020, BIOL 31600 and BIOL 507 are highly recommended.

Introduction to virus structure, evolution, and pathogenesis. Plant, Animal, and Bacterial viruses will be discussed, with an emphasis on human pathogens. Permission of instructor required.