WORCESTER POLYTECHNIC INSTITUTE

March 17, 2022

To: The WPI Faculty From: Mark Richman

Secretary of the Faculty

The seventh faculty meeting of the 2021-2022 academic year will be held on **Thursday**, **March 17**, **2022** at 3:15pm via Zoom (join after 3:00 pm at https://wpi.zoom.us/j/94717150686).

1. Call to Order M. Richman

- Approval of the Agenda
- Consideration of the Minutes from Feb. 17, 2022
- 2. Memorial Resolution: J. deWinter
 - In honor of Prof. Dean O'Donnell (Teaching Professor, IMGD)
- 3. Committee Business:

Committee on Information Technology (CITP) – for discussion, only

• Motion to revise the WPI Acceptable Use Policy (AUP)

4. Special Reports: for discussion

Report on Campus Mental Health and Well-Being: K. Foo
Focus on Faculty, Staff, and Special Student Populations M. Barry

R. Cowlagi

WPI faculty sentiment as reflected in the 2021 COACHE survey results

C. Demetry

- 5. President's Report L. Leshin
- 6. Provost's Report W. Soboyejo
- 7. New Business
- 8. Closing Announcements
- 9. Adjournment

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WORCESTER POLYTECHNIC INSTITUTE Faculty Meeting Minutes February 17, 2022

Summary:

- 1. Call to Order Approval of Agenda, Minutes from January 20, 2022, and Consent Agenda
- 2. Secretary of the Faculty Report
- 3. Committee Business: COG; COG; CAP; FAP/COG
- 4. Committee Report: CAP
- 5. Special Report: Update on progress toward addressing the challenges of academic and home life
- 6. Adjournment

Detail:

1. Call to Order

The sixth Faculty Meeting of the 2021-2022 academic year was called to order at 3:15pm via ZOOM by **Prof. Richman** (AE). The agenda for the meeting and the minutes of the January 20, 2022 meeting were approved with slight modifications. The consent agenda was approved as distributed. Prof. Richman thanked all those in our academic departments and in faculty governance who did the hard work to prepare the 14 motions in today's consent agenda.

2. Secretary of the Faculty's Report

Prof. Richman pointed to three important concerns: a campus-wide mental health crisis and our efforts to reduce stress on our students and ourselves; the resignation of Chair of WPI's Board of Trustees after only six months in that position; and a presidential leadership transition and the important role that the faculty should play in choosing both interim and permanent replacements. There have been preliminary listening sessions on campus concerning the presidential search, but the expectation is that these sessions are only preliminary, and that the entire faculty will have a chance to give its input both on the qualities of the incoming president and the search process itself well before any decisions are made.

WPI's faculty governance Chairs, the Parliamentarian, and the Secretary of the Faculty sent a letter to members of the Board of Trustees in which the faculty governance group expressed its views about the presidential search. The letter pointed with pride to the balance that we strike at WPI between innovative teaching and creative scholarship, which can create competing demands on resources. The letter also pointed out the importance of guaranteeing a warm and nurturing educational and social environment for our students, and of providing a productive yet accommodating quality of life for our faculty and staff. Critically, the letter emphasized that our next president should embrace the profound role played by faculty in setting institutional priorities and should respect the authority of the faculty as expressed by faculty governance and as individuals. The search process itself should be structured in a way that ensures the level of faculty representation that reflects the primacy of the faculty in carrying out our institutional mission. This means that the faculty should be well represented with respect to a search committee. Although an entirely closed confidential search was not endorsed in the letter, it stressed that if such a closed search were to be conducted, the need for strong faculty input and perspective within the process would be even greater. The confidence of the faculty in the search process will depend on our strong voice throughout.

Prof. Richman recognized Prof. Boudreau (HUA) to describe efforts underway to plan *WeConnect* on Feb. 24. **Prof. Boudreau** (HUA) explained that the purpose of the day is for the community to reconnect and take a first step to reorder our priorities and to rekindle the human interactions that that have decreased between us. The goal of *WeConnect* is to get people together, whether it's through academic advising or by providing easy opportunities for students, faculty, and staff to talk about things other than classes for next year. Students, academic departments, and the athletic department are all involved in planning events across campus throughout the day. Prof. Boudreau clarified that this one day is not meant to solve all our problems, but it is an experiment in how our campus culture could begin to change especially if our students take the lead. She

encouraged everyone to think about easy, creative, stress-free ways they can participate if they have time to do so.

3. Committee Business

COG

Prof. El-Korchi (CEAE), as Chair of the Committee on Governance, explained that the two motions to be presented today are intended to guarantee representation of our secured teaching faculty. (see **Addendum #1** on file with these minutes.)

Prof. El-Korchi moved, on behalf of COG, that Part One, Bylaw One, Section One (Membership, Duties and Responsibilities of Standing Committees of the Faculty), Section I (The Committee on Governance) of the Faculty Handbook be modified to update the membership of and election procedure for the Committee on Governance, as described in the materials distributed for this meeting. Prof. El-Korchi explained that the motion increases the number of elected members on COG from five to six; guarantees that two of the six will be secured teaching faculty members, while the remaining four members would be tenured or tenure-track faculty members. The motion also specifies that the President's appointment to COG will be made in collaboration with the committee, requires that the Chair of COG be tenured, and allows the Chair to serve at most two successive terms. The motion also modifies the election procedure for COG members and codifies several current practices. Prof. El-Korchi pointed out that based on feedback from and since our last faculty meeting, the elected COG membership was expanded to include tenure-track faculty, the number of names to be circled on the nominating ballots was increased from five to ten, and the number of names to appear on the final TTT ballot was increased from five to six.

Prof. Roberts (BBT), on behalf of the teaching and research faculty, expressed appreciation for the overall collaborative effort required to finalize these motions, in general, and for the changes made since January, in particular.

Prof. Ebadi (MME) asked if two of the elected positions on COG could be guaranteed for tenure-track faculty members. Prof. El-Korchi was confident that the motion as designed would well represent the whole community.

The motion **passed** (with well more than the two-thirds majority required).

COG

Prof. El-Korchi moved, on behalf of COG, that following the procedure described in Part One, Section Three, Subsection III of the Faculty Handbook, the Committee on Teaching and Research Faculty (CTRF) be added as a formal *ad hoc* Committee of the Faculty, as described in the materials distributed for this meeting. The motion complements the first by establishing a committee to address issues specific to teaching and research faculty. The committee membership would consist of three elected teaching faculty and the two nontenure-track faculty members on COG. The charge and form of the committee will be re-evaluated after three years. Prof. El-Korchi explained that based on feedback from and since our last faculty meeting concerning representation of the interests of our research faculty, the motion was modified to include an explicit statement that the CTRF will actively solicit the perspective of WPI's research professors and invite their representatives to participate in CTRF meetings as appropriate.

Prof. Neamtu (CS) asked if the three elected teaching faculty on CTRF included both tenure track teaching faculty and teaching faculty on secured contracts. **Prof. Richman** explained that both were included.

Prof. Smith (CS) asked who is eligible to vote for the elected teaching faculty on this committee. **Prof. El-Korchi** clarified that all faculty members with general voting privileges are eligible to vote for the members of CTRF.

Prof. Roberts appreciated that the explicit statement was added to solicit input from research faculty.

Prof. Farny (BBT) suggested adding as a friendly amendment the exact titles of those faculty members who are eligible to serve on CTRF. The amendment was accepted by **Prof. El-Korchi** and the titles were added with the caution from **Prof. Richman** that secured teaching faculty share their titles with short-term teaching faculty (who are ineligible to serve on CTRF), so an explicit listing of the titles can also cause its own confusion.

Prof. Heilman (CBC) asked if there were any governance committee for which only a subset of the voting faculty may vote for that committee's membership. **Prof. El-Korchi** confirmed that the system is all-inclusive and all voting faculty can vote in all faculty governance elections.

The motion **passed** (with well more than the majority required). **Prof. Richman** expressed pride in the whole faculty community for the collaborative effort and spirit required to pass both motions so convincingly.

CAP

Prof. Pavlov (SSPS), as Chair of the Committee on Academic Policy, moved that <u>undergraduate</u> students be given the option to receive Pass/NR grades in their undergraduate or graduate <u>courses</u> taken in C-term, D-term, and E-term 2022, as described in the materials distributed for this meeting. Students will have the option for one week after grades are posted to request the option to receive either a pass (P) or NR. Pass grades will count toward degree requirements. The motion is made in response to the ongoing pandemic and is parallel to similar motions passed for D-term 2020 grades and again for E-term 2020 grades.

Prof. Smith (IMGD) was in support of the motion and asked if students can select this option prior to grades closing. Both **Prof. Pavlov** and **Registrar Miles** (Registrar) clarified that the students will request the pass/NR option after grades are posted.

Prof. Chery (IMGD) suggested that the students should be notified as soon as possible about this option in order to relieve as much stress as possible. **Registrar Miles** explained that Dean Heinricher would communicate the policy change to the students and then the registrar would follow up with the operational details.

Prof. Neamtu (CS) was in full support of the motion but asked what happens for MQPs that had regular grades during A and B terms. **Prof. Heilman** (CBC) also supported the motion but wanted clarification about any term-by-term project grades that would be changed by the final eCDR grade. **Prof. Ganji** (ECE) wanted to make sure that the rules concerning project grades were clear to the students in the announcement to them. **Registrar Miles** explained a variety of scenarios related to when and if term project grades would or would not be changed by the eCDR grade. **Prof. Dudle** (CEAE) pointed out that any change of a P grade to the eCDR grade by the instructor would contradict the restriction in the proposed policy that a faculty member can not under any circumstances change a P-grade.

Prof. Billiar (BME) thought that students were generally not in favor of the pass/NR option. He was also concerned that students may not always understand the implications of the P grade as they are interpreted externally. **Registrar Miles** suggested some possible warnings that could be included in general messages sent to the students about exercising their pass/NR options. She included possibly mentioning how medical schools might look at P-grades and how P-grades might affect scholarship eligibility.

Prof. Richman, in reference to earlier comments and questions about project grades, pointed out that while there would be confusion if the policy were to apply to project grades, the motion itself is restricted to course grades, only. Because of the potential confusion, we should not now try to extend the policy beyond its original intent. **Prof. Pavlov** agreed that the policy applies only to course grades.

Prof. Heineman (CS) thought that the policy could work equally well for term-by-term project grades provided that students understand that if they select a one-term pass grade, then it will not be changed by an eCDR.

Prof. Roberts (BBT) wanted clarification about the applicability of the pass/NR option for undergraduates taking semester-long courses. **Prof. Pavlov** explained that the policy covers both term-long and semester-long courses.

Prof. Heilman (CBC) pointed out that students completing projects in a single term have less grade-choice flexibility than those students whose projects are completed over several terms.

Prof. Dudle (CEAE) proposed a friendly amendment to restrict the policy to courses, only. **Prof. Pavlov** accepted the spirit of the suggestion. **Prof. Richman** determined that the motion need not be amended to assume the course-only interpretation. He pointed out that CAP has the option at a future faculty meeting to bring a separate motion that would apply to projects.

Prof. Reidinger (BME) pointed out that students are oftentimes most anxious about their MQPs and the policy will not address that issue for them. **Prof. Pavlov** explained that the motion does give students options that will help them manage much of their stress, and that CAP can continue to consider additional measures regarding projects.

Prof. Rosewitz (CEAE) asked why some students were not in favor of the pass/NR option. **Prof. Pavlov** referred to minutes of previous CAP meetings, and explained that students were concerned about the impact of P-grades on graduate school and other applications. **Prof. Hall-Phillips** (BUS) pointed out that some students are high-performing over-achievers who may not represent the full population of students on campus, but that even many of them would like this option available to those that would take it.

Prof. Richman explained that as a faculty body, due to the limitations of what we can accomplish on the floor of a faculty meeting, we can either agree that the policy as written applies only to course grades, or we can table the motion and have CAP continue its deliberations until at least the March faculty meeting, which will be well after C-term ends. He hoped we could settle on an imperfect path that was most beneficial to our students.

Prof. Chery (IMGD) agreed that it made sense to take action today that would help our students in C-term.

Prof. Boudreau (HUA) has seen on social media that students are anxious to hear that they have the pass/NR option, and she cautioned against using our most elite students as spokespersons for the full range of our student body, especially because they would not be harmed if others were to exercise the option. **Prof. Pavlov** added that even without data on the effect of such a policy, it made sense to err on the side of increased flexibility to reduce student stress.

Prof. Smith (IMGD) suggested that all faculty members talk to their project-students and think about how the SP option can best be used to support them.

Prof. Shell (BBT) added that based on conversations she's had, there are students expecting this to be an option. And that they would be in favor of it even if they did not plan on using it themselves.

Prof. Richman clarified that we have adopted a literal interpretation of the language of the motion so that it applies only to courses and that it does not apply to *any* project grades. The vote on the motion will be on that strict interpretation.

The motion **passed** (with well more than the majority required).

FAP/COG

Prof. Spanagel (HUA), on behalf of the Committee on Governance (COG) and the Committee on Financial and Administrative Policy (FAP), moved that the current language describing FAP's membership (in Part One, Bylaw One, Section VIII) of the Faculty Handbook be revised, as described in the materials distributed for this meeting. (See **Addendum #3** on file with these minutes.) The motion increases the number of elected faculty members on FAP from three to five, and it now stipulates that the Chair of FAP must be a tenured member of the faculty. Prof. Spanagel explained that this stipulation for the Chair was added since the discussion of this motion and the motion concerning COG's membership at our January 20 meeting. The increase in elected members will be implemented over the next two election cycles, in which in each cycle one person will be replaced by two new members for three-year terms each.

The motion **passed** (with well more than the two-thirds majority required) with no further discussion.

4. Committee Report

CAP

Prof. Richman pointed out that this report is related to the previous motion because it also concerns another measure that faculty governance is exploring to relieve stress on our students.

Prof. Pavlov (SSPS), as Chair of CAP, explained that students' concerns about how the status of their academic standing affects their financial aid is an extremely common stressor for them. There are three related issues that need to be understood: academic standing; federal financial aid; and institutional (WPI) financial aid.

Registrar Miles explained that to maintain satisfactory progress, students must pass 4/3 units (12 credits) each semester. Failure to do so means that the student drops down one level in succession from warning, to probation, and then to suspension. A student who meets the minimum semester credit requirement moves back up the ladder one step at a time.

Dir. Sabourin (Dir. Student Aid and Financial Literacy) explained that WPI's financial aid rules are stricter than our academic standing policy. Currently, WPI students maintain satisfactory academic progress until they fail to complete 24 credits per semester, whereas they begin to lose a fraction of their financial aid as soon as they fail to complete 30 credits per semester. The hope is that by May 2022 WPI can align these two policies so that financial aid would not be cut until unsatisfactory progress were reached at 24 credits. WPI's institutional financial aid policy is also stricter than the federal guidelines, and we are looking to align our policy with the federal guidelines. These changes have budgetary implications, and WPI's CFO is studying the issue, as well.

Prof. Pavlov summarized by pointing out that the problem is that our financial aid policy, rather than our academic standing policy, is too strict.

Prof. Heilman (CBC) suggested that if we were to align the two polices by shifting the threshold for cuts in financial aid, then the percentage of cuts in financial aid should also shift in the same way. **Dir. Sabourin** understood that the concern was to avoid assessing students with a sudden large cut in aid.

Prof. Neamtu (CS) has heard from her students that their biggest source of stress is the fear of losing financial aid. Specifically, she was concerned about students who need to take a leave of absence for a term or a semester but cannot because they will lose their financial aid. **Dir. Sabourin** explained that students who take a leave of absence can appeal for fifth-year financial aid funding, and the appeal will be approved. **Prof. Neamtu** asked how taking a leave of absence effects academic standing. **Registrar Miles** explained that students on leave do not have their academic standing assessed.

Prof. Richman apologized to Prof. Demetry, Prof. Troy, and Prof. Neamtu because there will not be time for their presentation on the COACHE survey.

5. Special Report

Prof. deWinter (HUA) reported that she and Prof. Smith had met with Provost Soboyejo, Dean King and AVP Sullivan concerning the issues raised in their Feb. 17 faculty meeting presentation about academic and home life challenges. They grouped their requests into five areas: resources to support workload; workload models to match reality; improving campus culture; support for personal situations; and policies that cross-cut departments. **Prof. Smith** (IMGD) indicated that the actions requested had also been categorized into those that could be taken individually, by faculty governance, and by the administration. All items on the list of requests have now been assigned to an appropriate group. Prof. deWinter added that they plan to follow up with the administration next month and report back to the faculty. She encouraged people to forward their ideas or indicate their interest in working on these issues to her and to Prof. Smith. The Mental Health and Well-Being task force will soon be completing phase two of its

report focused on faculty and staff, and the findings and recommendations of the report dovetail nicely with this effort. Prof. deWinter also suggested several personal choices we each could make to improve the quality of our lives. (See **Addendum #5** on file with these minutes.)

Prof. Richman thanked Prof. deWinter and Prof. Gillian for following up on these issues so soon after last month's presentation.

7. Adjournment

The meeting was adjourned at 5:05pm.

Respectfully submitted,

Mark W. Richman Secretary of the Faculty

Addenda on file with these minutes:

Addendum #1 - COG - Motions to revise COG membership and establish CTRF - Minutes 2-17-22

Addendum #2 - CAP - Motion to provide P-NR grade option for C-D-E-terms 2022 - Minutes 2-17-22

Addendum #3 - COG-FAP - Motion to revise FAP membership - Minutes 2-17-22

Addendum #4 - CAP - Financial Aid - Academic Standing Presentation - Minutes 2-17-22

Addendum #5 - Update on Academic and Home Life Challenges - Minutes 2-17-22

(For discussion, only)

Date: March 17, 2022 **To:** WPI Faculty

From: Committee on Information Technology Policy (Prof. R. V. Cowlagi, Chair)

Re: Motion to revise the WPI Acceptable Use Policy

<u>Motion:</u> The Committee on Information Technology Policy recommends, and I move, that the WPI Acceptable Use Policy (AUP) be revised as described below.

Description of the Motion:

The proposed revisions are minor updates to the policy language and sectioning in accordance with the new standardized template used for all WPI policies. For comparison, the proposed AUP and the current AUP are provided on the pages that follow.

Proposed Acceptable Use Policy (AUP)

I. <u>Policy Statement</u>

Worcester Polytechnic Institute (WPI) establishes and maintains Computing and Networking Resources for shared use by authorized members of the WPI community. These resources are essential in providing academic, research and university business for exclusive use by the WPI community.

This Acceptable Use Policy (AUP) outlines responsibilities and obligations by Users of these resources. The intent of this policy is to promote the efficient, ethical, and lawful use of such resources.

II. Scope

This policy applies to all Users, including all students, faculty, staff and guests who access WPI's Computing and Network Resources.

III. <u>Definitions</u>

"Users" refers to those members of the WPI community (including students, faculty, staff, emeritus employees, and contractors) who are authorized to access WPI Computing and Networking Resources.

"WPI Computing and Networking Resources" refers to systems, networks, applications, information, lab computers, research computers, and similar owned by WPI that support academic, research and business purposes. For purposes of this policy, this definition includes WPI computing and networking resources that are accessed by personally-owned devices (such as a personal mobile device).

IV. Policy

A. Key Elements of the AUP Policy

Comply with the intended use of WPI Computing and Networking Resources.

All WPI Computing and Networking Resources are used for academic and campus business priorities, with non-academic use being a secondary activity. Users shall comply with WPI's technical, administrative, and process controls. Users will not engage in disruptive activity that could cause a failure or degradation of systems or services used by others. Users will not subvert a system or service for illegal or inappropriate use as defined by the usage standards, WPI Student Code of Conduct, and WPI's Employee Benefits and Policies Manual.

Ensure the ethical and legal use of WPI Computing and Networking Resources.

Users must not use WPI Computing and Networking Resources for unethical or illegal activities. Users shall respect the privacy of others, use data only as authorized by the data owner, and not use these resources to harass or attack others. WPI and its community members are also subject to, and must comply with, federal, state, and local laws.

Respect WPI property and WPI Computing and Networking Resources.

Users must obey technical and administrative controls regarding access. Users shall not take technical means to bypass these controls. Users must not grant access to WPI Computing and

Networking Resources to anyone outside the WPI community without express permission. WPI retains the right to review and audit any WPI-owned electronic communication devices, connections, and services to ensure the security and integrity of WPI computing and networking resources and prevent unauthorized access, malicious software or other potential security / operational issues and maintain compliance with WPI policies. WPI retains the right to deny network access to any non-WPI owned electronic communication devices.

Respect the personal property and privacy of other users.

Users must ensure they handle WPI and personal property within the guidelines set by the property owner. Users must respect the security and privacy of others and refrain from monitoring or accessing private information without permission. Users must respect copyright regulations and the personal copyright of others.

Use the WPI Computing and Networking Resources for non-commercial purposes only.

WPI Computing and Network Resources may not be used for commercial use, to host advertising, or to create or mine digital currencies. Users may not resell WPI Computing and Network Resources. Such usage is inconsistent with WPI's academic and research missions and WPI's non-profit status.

B. University Response to AUP Violations First and/or Minor Violations:

Student- and employee-Users will have a meeting with a member of Information Security to discuss how the User's activities may have violated the AUP. During the meeting, the AUP will be reviewed with the User to ensure understanding. The discussion will be conversational in nature and non-adversarial, with the goal of both educating and preventing further violations. As such, the discussion will serve as a warning. WPI Computing and Networking Resources that are registered to the User may be disabled until the User has had a discussion about the incident.

Repeat Violations:

<u>Students:</u> In the event of suspected repeat violations, the User will have a meeting with a member of Information Security. During the meeting, the alleged violations and the AUP will be reviewed. Depending on the nature of the further violation(s), the incident may be: (1) handled in the same manner as a first and/or minor violation; or (2) referred to the Dean of Students Office for resolution. As part of the resolution, WPI Computing and Networking Resources registered to the User may be disabled for up to one (1) week.

<u>Employees:</u> In the event of suspected repeat violations, the User will have a meeting with a member of Information Security. During the meeting, the alleged violations and the AUP will be reviewed and the details of the violation(s) will be referred to WPI's Division of Talent and Inclusion for resolution.

Serious Violations:

<u>Students:</u> Alleged violations of a more serious nature (e.g., activities which exhibit malicious intent to compromise, disrupt, or circumvent security of the AUP) may be referred to the Dean of Students Office for resolution. Please refer to the WPI Student Code of Conduct for a full

description of resolution methods and processes. WPI Computing and Network Resources registered to the User may be suspended pending the resolution of the case.

<u>Employees:</u> Alleged violations of a more serious nature will be referred to WPI's Division of Talent and Inclusion for resolution.

V. Exceptions to the Acceptable Use Policy

Exceptions to the AUP and related standards are granted on a case-by-case basis. If an exception is requested, Information Security will work with the requestor to help determine the best course of action. Exceptions for academic purposes can be requested by a Faculty member.

VI. Questions

If you have any questions regarding this policy, please contact the WPI Service Desk at its@wpi.edu.

* * *

Policy Sponsor: Chief Information Officer

Responsible Department: Information Technology

Effective Date (i.e., date of Presidential Approval): TBD

Revision History:

- August 19, 2008 IT approved the revised AUP for students. Until the updated version is approved by the Policy Committee, the prior version still applies to employees.
- October 20th, 2008 Minor style and format changes.
- August 18th, 2008 Added Proxy Usage Standard
- October 2, 2015 Updated and approved by IT and the Committee on IT Policy
- TBD 2022 Updated and approved by ITS and the Committee on IT Policy

Current Acceptable Use Policy (AUP)

Introduction

Worcester Polytechnic Institute (WPI) maintains computing resources, including data and information, which are essential to performing University business. These are WPI assets over which the University has both rights and obligations to manage, protect and utilize to fulfill its mission. The Acceptable Use Policy was established to create usage standards in compliance with other University policies as well as regulatory requirements.

This Acceptable Use Policy (AUP), the Campus Code of Conduct, the Administrative Data Management Policy, and several other university policies govern WPI's computing resources collectively.

Purpose

The purpose of the AUP is multifold, as identified below:

- Educate the WPI community about the policies on the use of electronic facilities.
- Ensure all members of the WPI community have appropriate access to functional and safe technology resources.
- Prevent any misuse of, or damage to, computer assets or data.
- Clarify the application of the Code of Conduct to specific computer and network technologies.
- Assist the University and employees in complying with federal and state legislation regarding information security, privacy, disclosure, computer crime, and other information and computer legislation.

Scope

This policy applies to all users of WPI technology resources. It applies to any systems, software, components, or data that are connected to or utilize the WPI network and its computer systems. It applies to both academic and non-academic communication and activities.

Policy

Comply with the intended use of any system or service at WPI.

All systems and services available at WPI are used for academic and campus business priorities, with non-academic use being a secondary activity. Users shall comply with WPI's technical, administrative, and process controls. Users will not engage in disruptive activity that could cause a failure or degradation of systems or services used by others. Users will not subvert a system or service for illegal or inappropriate use as defined by the usage standards, WPI Student Code of Conduct, and Employee Handbook.

Ensure the ethical and legal use of WPI technology resources.

Users must not use any WPI system or service for unethical or illegal activities. Users shall respect the privacy of others, use data only as authorized by the data owner, and not use WPI technology resources to harass or attack others. The University and WPI community members are subject to, and must comply with, federal, state, and local laws.

Respect WPI property and resources.

Users must obey technical and administrative controls regarding access. Users shall not take technical means to bypass these controls. Users must not grant access to WPI resources to users outside the WPI community without express permission of the university. WPI retains the right to review and audit any university-owned electronic communication devices, connections, and services to ensure compliance with WPI policies. WPI retains the right to deny network access to any non-WPI owned electronic communication devices.

Respect the personal property and privacy of other users.

Users must ensure they handle University and personal property within the guidelines set by the property owner. Users must not invade the privacy of others by illicitly monitoring the network traffic of others or accessing private files without permission. Users must respect copyright regulations and the personal copyright of others.

Use the WPI network and computing resources for non-commercial purposes only.

The WPI network and computing systems may not be used for commercial use, to host advertising, or to create digital currencies. Users may not resell WPI computing or network resources. Such usage is inconsistent with WPI's academic and research missions and WPI's non-profit status.

Standards

The Acceptable Use Policy is administered through a collection of standards. The WPI Acceptable Use Policy and its standards are in effect at all times. The WPI Information Technology Services works in concert with the Dean of Students Office, the Campus Hearing Board, and Human Resources to ensure fair and appropriate investigation, consideration, and consequences where appropriate. Users are expected to familiarize themselves with the standards and comply with them.

- Responsible Copyright Standard
- Common Website Usage Standard
- Common Electronic Mail Standard
- Proxy Usage Standard

Exceptions

Exceptions to the Acceptable Use Policy and its related standards are granted on a case-by-case basis. If an exception is requested, Information Security will work with the requestor to help determine the best course of action to minimize and possibly eliminate any such conflict. Exceptions for academic coursework can be requested by a Faculty member.

University Response to AUP Violations

<u>First and/or Minor Offenses:</u> Students and employees will have a meeting with a member of Information Security to discuss how the individual's activities may have deviated from the AUP Policy or Standards. During the meeting, the AUP Policy will be reviewed with the individual to ensure understanding. The discussion will be conversational in nature and non-adversarial, with the goal of both educating and preventing further offenses. As such, the discussion will serve as a

warning. Computers and resources that are registered to the individual may be disabled until the owner has had a discussion about the incident.

Repeat and/or Serious Offenses: In the event of suspected repeat offenses, students will have a meeting with a member of Information Security to discuss the further offenses. During the meeting, the alleged violations and the AUP policy will be reviewed. If the student admits responsibility for the violations, they will sign an AUP Administrative Agreement. As part of the resolution to the incident, computers and resources that are registered to the individual may be disabled for up to one week following this meeting. The AUP Administrative Agreement and supporting documentation will be filed with the Dean of Students Office and a formal judicial record will be created. If the student does not admit responsibility for the alleged violation, the case will be forwarded to the Dean of Students Office for resolution.

For students, alleged violations of a more serious nature (e.g. activities which exhibit malicious intent to compromise, disrupt, or circumvent security of the AUP Policy) may be referred to the Dean of Students Office and/or the Campus Hearing Board for resolution. Please refer to the WPI Student Code of Conduct for a full description of judicial resolution processes. Computers and resources that are registered to the individual may be suspended pending the resolution of the case.

If an employee is involved with suspected repeat violations of the AUP, the employee will have a meeting with a member of Information Security to discuss the further offenses. During the meeting, the alleged violations and the AUP policy will be reviewed and the details of the second incident will be forwarded to Human Resources. Alleged violations by employees of a more serious nature will be referred to Human Resources for resolution.

Reporting, Questions, and Assistance

Address any questions, exception requests, or report any suspected violations of the Acceptable Use Policy to the Office of Information Security, at itsecurity@wpi.edu.

Revision History

- August 19, 2008 IT approved the revised AUP for students. Until the updated version is approved by the Policy Committee, the prior version still applies to employees.
- October 20th, 2008 Minor style and format changes.
- August 18th, 2008 Added Proxy Usage Standard
- October 2, 2015 Updated and approved by IT and the Committee on IT Policy

Rationale: The Acceptable Use Policy (AUP) broadly addresses usage of WPI's information technology resources by all members of the WPI community. The existing AUP was updated and approved by CITP and WPI-ITS in October 2015. The proposed revisions are minor updates to the policy language and sectioning in accordance with the new standardized template used for all WPI policies.

Appendix Consent Agenda Motions

Date: March 17, 2022 **To**: WPI Faculty

From: Committee on Academic Operations (Prof. L. Titova, Chair)

Re: Motion to change course numbers for AS 4001, AS 4002, AS 4003, and AS 4004

<u>Motion</u>: On behalf of the Air Force Aerospace Studies (AFROTC) Department, the Committee on Academic Operations (CAO) recommends and I move that the course numbers for AS 4101, AS 4102, AS 4103, and AS 4104 be changed to AS 4001, AS 4002, AS 4003, and AS 4004, respectively, as described below.

Description of the motion:

The Air Force Aerospace Studies Course course number changes are described below. The course titles and descriptions are not changed.

Changes:

AS 4101 National Security/Commissioning Preparation I is changed to AS 4001 National Security/Commissioning Preparation I

AS 4102 National Security/Commissioning Preparation II is changed to AS 4002 National Security/Commissioning Preparation II

AS 4103 National Security/Commissioning Preparation III is changed to AS 4003 National Security/Commissioning Preparation III

AS 4104 National Security/Commissioning Preparation IV is changed to AS 4004 National Security/Commissioning Preparation IV

EXISTING NUMBER and NAME	NEW NUMBER and NAME		
Professional Officer Course			
AS 4101	AS 4001		
AS 4102	AS 4002		
AS 4103	AS 4003		
AS 4104	AS 4004		
Existing Numbering Convention for other AS Courses (1st through 3rd year students)			
AS 1001, 1002, 1003, 1004			
AS 2001, 2002, 2003, 2004			
AS 3001, 3002, 3003, 3004			

Rationale:

This motion does not introduce new courses but changes existing course numbers to align with the current AS 1000, 2000, and 3000 series courses. This course number change will standardize the numbering convention across all four years of AFROTC, as the table above demonstrates.

Current course numbers have been inherited from the year 2000, when the Air Force introduced title changes and WPI followed suit with new numbers. The proposed numbers make it easy for students to ascertain the level of the course and provide consistency across all four years of the AFROTC program.

Resource Needs: No additional resources are needed because there is no net increase in the number of courses taught by AS faculty.

Implementation Date: Implementation date for this action is the 2022-2023 academic year.

Impact on Degree Requirements: No impact on distribution requirements.

Contact: Craig Code

Date: March 17, 2022 **To**: WPI Faculty

From: Committee on Graduate Studies and Research (Prof. Korkin, Chair)

Re: Motion to add WR 513: Ethical Impact and Communication in Robotics and AI Research

<u>Motion</u>: On behalf of the Humanities and Arts department, the Committee on Graduate Studies and Research recommends and I move that *WR 513*: Ethical Impact and Communication in Robotics and AI Research be added, as described below

Proposed Course Description:

WR 513: Ethical Impact and Communication in Robotics and AI Research (3 credits)

Engineers and other technologists are increasingly more aware of the ethical, legal, and social impacts of robotics and artificial intelligence. Some of them actively contribute to the creation and communication of new sets of ethical standards, such as the work done by IEEE's Global Initiative on Ethics of Autonomous and Intelligent Systems. What are the ethical principles that underpin these new standards? Since robots and AI systems are designed to work with or alongside humans, do people have a right to understand what autonomous systems are doing and why? How can roboticists and AI designers ensure that these systems are transparent and explainable? This course focuses on the communication of ethical and social impacts of scientific research and technology development. After learning about major debates in robot/AI/data ethics, students will cultivate skills to (1) conceptualize ethical inquiries in technology design and (2) articulate them in writing and other forms of scholarly communication. As part of this course, students will learn to apply the National Science Foundation's (NSF) broader impacts framework to their writing projects (dissertation, thesis, journal publication, grant application, etc.).

Contact: Yunus Telliel (ydtelliel@wpi.edu)

Rationale:

This course has been designed as part of a five-year NSF NRT grant on "Robotic Interfaces and Assistants for the Future of Work" (Award Number: 1922761 – PIs: Cagdas Onal, Zhi Jane Li, Pratap Rao, Yunus Telliel, Jing Xiao – Senior Personnel: Provost Wole Soboyejo, Soussan Djamasbi, Jeanine Skorinko). Yunus Telliel is a co-PI on this grant as well as the Humanities and Social Sciences lead on WPI's "Future of Robots in the Workplace—Research and Development Program" (FORW-RD) program established with the grant: https://wp.wpi.edu/forwrd/

One of the strategic goals of the grant was to introduce a graduate course on ethics and communication in robotics research, and Professor Telliel, as the faculty member who has expertise in this field, is expected to teach this course.

Professor Telliel has already taught this content under the 'WR 593: Special Topics in Writing and Communication' course in Spring 2021 and Fall 2021. After interviewing the graduate students who took the course in Spring 2021, the external evaluators of the NSF grant suggested that the grant leadership team considers Professor Telliel's ethics and communication course as the backbone of the FORW-RD program. Indeed, the leadership team have recently voted on this suggestion and made Professor Telliel's course the only required course of the program.

Last year the Robotics Engineering Department's Graduate Committee expressed interest in adding a course like this into their 'engineering context' requirement course pool. If this course becomes a

permanent course (not appearing under the 'Special Topics' title), it will appear on RBE's graduate course catalog.

As a course on the communication of 'broader impacts of research' in robotics and AI research, the proposed course is unique in the North American academic context. Given that the National Science Foundation (NSF), the National Institutes of Health (NIH), and other federal funding agencies increasingly prioritize the 'broader impacts' (BI) criterion in their reviews, this course will contribute to WPI's recent efforts to help increase research output and dissemination. Professor Telliel's work has been recognized by the U.S. network of BI scholars and practitioners. In 2021, the NSF-sponsored Center for Advancing Research Impact in Society awarded Professor Telliel a fellowship with a small grant to support his work: https://research-impacts/

Intended audience: Graduate student trainees in the FORW-RD (Future of Robots in the Workplace – Research & Development) NRT program, as well as graduate students enrolled in masters and doctoral programs in Robotics Engineering, Mechanical Engineering, Computer Science, Interactive Media and Game Development, Computational Media, Data Science, Innovation with User Experience, and Science and Technology for Innovation in Global Development.

Expected enrollment: 20

Assessment: This course will be assessed based on the quality of weekly assignments and course projects, as well as student reflections on the course material. Student evaluations (particularly open-ended questions) and instructor reflections will also be taken into account.

Impact on Degree Requirements: This course will have no impact on current distribution requirements. Graduate students might be able to use this course as an elective if such an action is approved by their graduate studies coordinator and advisor. PW faculty will work closely with graduate coordinators.

Resources: No new resources are required.

Implementation: The course will be offered for the first time in Spring 2023

Date: March 17, 2022 **To**: WPI Faculty

From: Committee on Graduate Studies and Research (Prof. Korkin, Chair)

Re: Motion to remove ECE 529, ECE 566, ECE 5715, ECE 5905, and ECE 630

<u>Motion</u>: On behalf of the Electrical and Computer Engineering department, the Committee on Graduate Studies and Research recommends and I move that ECE 529 Selected Topics in Electronic System Design, ECE 566 VLSI Design, ECE 5715 Reconfigurable Computing, ECE 5905 Advanced Bipolar Solid State Devices, and ECE 630 Advanced Topics in Signal Processing be removed.

Description of the Motion:

The following course descriptions will be removed from the WPI graduate catalog:

ECE 529. Selected Topics in Electronic System Design

Courses in this group are devoted to the study of advanced topics in electronic system design.

ECE 566. VLSI Design

VLSI Design introduces computer engineers and computer scientists to the techniques, methodologies and issues involved in conceptual and physical design of complex digital integrated circuits. The course presupposes knowledge of computer systems and hardware design such as found in ECE 505, but does not assume detailed knowledge of transistor circuits and physical electronics. (Prerequisite: ECE 505 or equivalent.)

ECE 5715 Reconfigurable Computing

This course focused on the principles and applications of using FPGAs for reconfigurable computing. The key feature of reconfigurable computing is its ability to perform computations in customized hardware, while retaining much of the flexibility of a software solution. This course provides an overview of field programmable gate array (FPGA) architecture and technology. It introduces computer-aided design tools for FPGAs including synthesis, timing, placement, and routing. The course emphasizes on the techniques to analyze algorithms and to implement them on the FPGAs. It demonstrates real-time signal and data processing in customized hardware circuits. This course also covers system-on- chip design using the embedded processors inside the FPGAs. Partially reconfiguration and runtime reconfiguration design flow are also included.

ECE 5905. Advanced Bipolar Solid State Devices

The operation of the bipolar junction transistor (BJT) will be explored in detail, resulting in thorough understanding of observed phenomena including second-order effects that limit device performance in practical integrated circuit applications. The course begins with a review of semiconductor fundamentals and p-n junction behavior, followed by extension to the BJT, with an emphasis on effects such as temperature dependence of operation parameters, deviations from ideal behavior at high and low voltages and currents, and failure modes such as Zener and avalanche breakdown. BJT behavior will be modeled for large and small signals under DC, AC, and transient conditions. Results from theoretical handanalysis equations will be correlated with model parameters in software tools such as SPICE. Implications of fabrication technology including device scaling in submicron processes will be considered. This course is intended for students pursuing study in either integrated circuit design or device physics. (Prerequisite: undergraduate analog electronics).

ECE 630. Advanced Topics in Signal Processing

The course will cover a set of important topics in signal and image analysis: orthogonal signal decomposition, wavelet transforms, analytic signals, time-frequency estimation, 2D FT, Hankel transform and tomographic reconstruction. In addition, the course will each year have selected current topics in signal processing, e.g., ambiguity functions in RADAR and SONAR, coded waveforms, Fourier based beamforming for 2D arrays and single value decomposition. In place of a final exam, there will be a student project. The course is intended for students working in areas such as image analysis, NDE, ultrasound, audio, speech, RADAR, SONAR and date compression. Signal/image theory and applications will be emphasized over coding; however, Matlab-based modules for self-paced signal/image visualization and manipulation will be part of the course. (Prerequisites: ECE 504 Analysis of Deterministic Signals and Systems, undergraduate course in linear systems theory and vector calculus.)

Rationale:

These courses have not been offered in the past several years and no current faculty plan to offer them in the near future. The ECE department is attempting to streamline its list of offered graduate courses to reduce confusion among prospective and current graduate students.

Impact on Degree Requirements: This change will not have any impact on degree requirements.

Implementation Date: Implementation date for this action is the 2022-2023 academic year.

Date: March 17, 2022 **To**: WPI Faculty

From: Committee on Graduate Studies and Research (Prof. Korkin, Chair)

Re: Motion to add BUS 631, BUS 632, BUS 633, and BUS 651

<u>Motion</u>: On behalf of the Business School, the Committee on Graduate Studies and Research recommends and I move that BUS 631 *Research Methods and the Research Process*, BUS 632 *Qualitative Research Methods*, BUS 633 *Quantitative Research Methods*, and BUS 651 *Seminar on Designing and Conducting Research* Studies, as described below, be added.

Proposed Course Descriptions:

BUS 631 Research Methods and the Research Process (3credits)

This course introduces PhD students to business problems and the nature, scope, and purpose of research and research methodologies to study those problems. Topics include research approaches and designs, data types and their collection, measurement approaches, testing procedures, and interpreting and presenting findings. The ethics of various methods and data collection procedures are covered, as is the Institutional Review Board (IRB) process. Students will investigate applications of research methods to specific problems within their interest area, using qualitative and quantitative designs. They will also read example articles that use the research approaches covered. (Prerequisite: Admission to the Business School PhD program or to another WPI PhD program.)

BUS 632 Qualitative Research Methods (3 credits)

Capturing and analyzing rich sets of qualitative (descriptive, non-numerical) data is typically required to investigate complex business cases, from discovering opportunities for innovation to identifying root causes of business problems. While quantitative business data is increasingly available, qualitative data is often the source of the deeper understanding needed for exploring, explaining, and developing theories for complex socio-technical business environments that dominate our digital economy. This course focuses on methods for collecting and analyzing qualitative research data with the purpose of enabling students to make the novel discoveries that characterize PhD research in business. Students will become familiar with methods for collecting (e.g., interviews and focus groups) and analyzing (e.g., coding techniques and case study analysis methods), as well as the software packages that aid in qualitative data organization and analyses. They will understand which collection, coding, and analysis techniques to use in which situations, how to interpret results, and how data collection and analysis methods affect research results. These skills are critical for understanding how business can contribute to solving the large, societal problems within and across disciplines and industries. (Prerequisite: Admission to the Business School PhD program or to another WPI PhD program, BUS 631 or equivalent knowledge)

BUS 633 Quantitative Research Methods (3 credits)

Developing predictive behavioral models, which heavily rely on quantitative (numeric) data, are a major success factor in helping businesses develop competitive products and services. This course focuses on methods for collecting and analyzing quantitative research data with the purpose of enabling students to make the novel discoveries that characterize PhD research in business. Students will become familiar with one or more internationally utilized statistical software packages and with the array of statistical analysis techniques in them. They will understand which statistical analysis techniques to use in which situations, how to interpret the output from these packages, and how data collection and analysis methods affect research results. In our increasingly data intensive business environment, these skills are critical for understanding business data and using that understanding to design better processes and systems and to

make better decisions within and across industries. (Prerequisite: Admission to the Business School PhD program or to another WPI PhD program, BUS 631 or equivalent knowledge)

BUS 651 Seminar on Designing and Conducting Research Studies (3 credits)

This course is offered every semester for cohort students as they start their research studies. It bridges between students' methods courses and the start of their 30 dissertation credits. It is conducted in seminar format with a focus on students presenting the progress on their research studies and discussion among the class about appropriate research designs and analyses. This course can be taken multiple times. (Prerequisite: Admission to the Business School PhD program or to another WPI PhD program, BUS 631 or equivalent knowledge, BUS 632 or BUS 633 or equivalent knowledge.)

Rationale:

The PhD program in WPI's Business School awards a PhD in Business Administration in three concentrations: Entrepreneurship, Information Technology, and Operations Management. We admit one or two students in each concentration each year. Most of the students entering this PhD program are traditional PhD students, who have recently completed an MS degree and want to purse a PhD degree to qualify for academic jobs or specialty jobs in industry.

A few of our students are executives, with significant industry and managerial experience and expertise. We have decided to increase the number of students with such a background for several reasons. First, there is demand for such programs, evidenced by successful executive PhD cohorts at University of Denver and Oklahoma State University (see further information later in this document), and the presence of such students already in our program. Second, these students will improve the Business School's connections with the business community. Such connections will benefit our undergraduate and graduate students, as well as enable Business School professors to engage in practical research of more immediate impact. They will also serve as models that will enable us to recruit more such students. Finally, these students will be self-paying, either funded by themselves or their companies, generating approximately \$96K per student for their 60 credits.

For such students, our current apprenticeship-based PhD program that relies on a close working relationship with a faculty advisor to learn research methods is not feasible. Instead, we will consider such students as a cohort that will take basic research courses together, which is the reason we are adding the above courses. As a cohort, the first and second courses will be taken in the fall and spring of their first year, the third in the fall of their second year. After that, students can register for the fourth course until they are ready to begin dissertation credit. With the basis of these courses, students will be ready for doing their dissertation with a faculty advisor. Furthermore, these courses will be offered at least partially online, enabling us to attract executives who will not be on-campus, except occasionally.

Business/organizational research is conducted using a variety of different methodologies including, statistical methods, simulation methods, and the analysis of language and behavior. Business researchers need to have a diverse tool kit of methods to use, which will vary by type of study conducted. It is very rare for a business researcher to only use one method in their career and often, even in one study. For example, in studying the entrepreneurial efforts of a business owner with a social mission, there are often no standard numerical measures of success, such as revenues or profits. Instead, the researcher will need to hold interviews with the business owners or conduct ethnographic studies to determine how they measure their impact on society. Often a business research study will use both quantitative methods (i.e., statistical analyses) and qualitative methods (i.e., interviews) in a single study. Thus, PhD students need to know how to conduct studies using both methods (BUS 632 and BUS 633) and then understand when

to appropriately apply these methods to their study (BUS 651). BUS 631 is the introductory course that sets up a foundation for the other three classes.

Comparable Programs at other Universities

We have modeled our courses on the Executive PhD program at the Daniels Business School at the University of Denver, https://daniels.du.edu/executive-phd/. They modeled their program on the PhD in Business for Executives program at the Spears School of Business at Oklahoma State University, https://business.okstate.edu/execphd/index.html. While these two are a small sample of executive PhD programs in business, they indicate that we can be successful with this initiative.

Both programs are designed for working executives, who can earn a PhD while continuing their careers. They are hybrid programs with asynchronous and synchronous online components, as well as some residences. The OK State program has graduated six cohorts, averaging about 10 graduated students in each cohort. It is a 60-credit program, for about \$65K total. The DU program has taken in three cohorts, each of 15 students or more, with the first cohort nearing graduation. It focuses on established business leaders with ten years of significant work experience, who have master's degrees already. The total cost of the DU program is \$131K, while ours is less than \$100K. Despite its high cost, the DU program has attracted more students in each cohort than the OK State program at \$65K total.

We already have four executives in our PhD program. The most recent executive entering our PhD program is an MS alum from WPI with 20 years of industry experience at the intersection of IT and entrepreneurship, focusing on the IT-supported processes needed to bring new biomedical products to market. He understands and is willing to pay the approximately \$100K for our PhD program. The Business School expects to be successful with recruiting executives into our Business PhD program given that (1) we have attracted executive students to our PhD program without even seeking them, (2) two other schools have been successful with executive PhDs, and (3) we are in the thriving Boston and Massachusetts high tech, entrepreneurial economy.

Executive Recruiting Goals:

We plan to recruit 10-15 executives for Fall 2022, growing to cohorts of 15-20 over the next four years, to give us a steady state of 45-50 executive students in our Business PhD program at any time.

Impact on Degree Requirements: The requirements for the PhD program in Business Administration and its research dissertation, as well as its Program Competency Goals and Assurance of Learning measures, will not change. The proposed courses are a mechanism to handle more students. The students in the cohort will be prepared for dissertation work through courses rather than close apprenticeship with an advisor. Each student will have a faculty advisor but that advisor can rely on the courses to prepare students. Our traditional students will be allowed to take these courses with permission of their advisor, as will PhD students in other programs at WPI.

Executive students will conduct publishable research and produce a research dissertation. Their dissertations, however, will differ from those of our traditional students, who will typically conduct indepth research in a narrower topic in their discipline. Executive students will tackle more practical and likely more interdisciplinary problems, but also produce publishable contributions to the literature.

All PhD students, both traditional and executive, can take a variety of other courses, typically MS courses from the Business School but also courses in other WPI schools, as selected under the guidance of the student's PhD advisor. In particular, the new methods courses complement the disciplinary methods courses, listed below, that the Business School offers at the MS level. Most of these methods courses are offered online, and are thus easily available to executive students who are not regularly on campus.

Existing Business School Methods Courses (MS level)

- MIS 584 Business Intelligence
- MIS 586 User Experience Research Methods
- MIS 587 Business Applications in Machine Learning
- MKT 562 Marketing Research
- MKT 568 Data Mining Business Applications
- OIE 542 Risk Management and Decision Making
- OIE 548 Performance Analytics
- OIE 552 Modeling and Optimizing Processes
- OIE 559 Optimization for Business Analytics

<u>Resources and Anticipated Instructors</u>: BUS 631, 632, and 633 will be offered once per year and will be taught in-load. BUS 651 will be offered both fall and spring each year in a seminar format. It will not be inload teaching. Seminar instructors will receive extra compensation.

Since the Business School is AACSB accredited, the instructors for these courses must meet AACSB standards for PhD level instruction, as follows:

- For BUS 631 and BUS 651, which are courses focused on the research process, instructors must meet the Business School's standards for Chairing a dissertation committee. Specifically, the instructor must be from one of the disciplines in which we offer a PhD concentration, must be a "Scholarly Academic" according to AACSB, and must publish according to our journal lists for PhD advisors in a discipline.
- For BUS 632 and BUS 633, which are focused on qualitative and quantitative methods respectively, instructors may be from a discipline in which we do not have a PhD concentration because methods often apply to multiple disciplines. These instructors must meet two criteria: (1) be a "Scholarly Academic" according to AACSB and (2) have published at least one research article using the types of methods to be taught.

We have multiple professors in the Business School who meet these standards.

We plan to rotate professors in these courses so that executive students get experience with working with a variety of professors who might chair their dissertation committee or advise them on the use of a specific research method. Each of the methods courses will be jointly designed by the group of faculty who might teach it so that the course does not change dramatically as professors change each semester.

During a year when a faculty member is teaching a PhD course, their regular course will be covered by an adjunct. We will need 2 adjuncts during our first year of launch and 4 adjuncts/year steady state to support the offering of these courses. Funds for the adjuncts will come from the Business School's adjunct budget.

<u>Implementation Date</u>: Implementation of these courses will occur over two years, with the first two courses offered in 2022-2023 academic year.