

WORCESTER POLYTECHNIC INSTITUTE

April 18, 2023

To: The WPI Faculty
From: Mark Richman
Secretary of the Faculty

The eighth Faculty meeting of the 2022-2023 academic year will be held on **Tuesday, April 18, 2023 at 3:15pm in OH 107 and by Zoom at: <https://wpi.zoom.us/j/99494452119>**. Refreshments will be available in OH 107 at 3:00pm.

1. Call to Order M. Richman
 - Approval of the agenda
 - Approval of the consent agenda including minutes of the March 30, 2023 meeting
2. Opening Announcements
3. President's Report G. Wang
4. Committee Business:
 - Committee on Governance (COG) – for discussion only
 - **Motion to Adopt the Reorganized Faculty Handbook:
Focus on Tenure, Promotions, and Faculty Grievance Procedure** L. Albano
G. Heineman
M. Richman
 - Committee on Academic Policy (CAP)
 - **Motion to establish a new undergraduate BS degree program
in Financial Technology (FinTech)** B. Servatius
A. Hall-Phillips
 - **Motion to allow changes to submitted student projects for protecting
privacy and confidentiality** B. Servatius
B. Calli
5. New Business
6. Provost's Report W. Soboyejo
7. Closing Announcements
8. Adjournment

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WORCESTER POLYTECHNIC INSTITUTE

Faculty Meeting Minutes

March 30, 2023

Summary:

1. Call to Order; Approval of the Agenda
2. Opening Announcements
3. Committee Report: COG
4. Special Report
5. New Business
6. President's Report
7. Closing Announcements
8. Adjournment

Detail:

1. Call to Order

The seventh Faculty Meeting of the 2022-2023 academic year was called to order at 3:15pm in Olin Hall 107 by **Prof. Richman** (AE). Prof. Richman reminded all those in attendance that the meeting was being recorded for the purpose of accurate minutes, only. The revised meeting agenda was approved. The consent agenda including minutes from the March 6, 2023 meeting and 17 motions from CAO were approved. Prof. Richman thanked all the faculty members on CAO and all the faculty within their departments for the hard work required to bring the CAO motions forward.

2. Opening Announcements

Prof. Richman reported that the election for a tenured or tenure-track COG member is in process. When it is completed, the results of the COG, CTAF, and COAP elections will be announced at once. COG will then be soliciting interest from all faculty members willing to have their names appear on the ballots for the remaining standing committees.

Prof. Sanbonmatsu (HUA) announced that a WPI AAUP Chapter open meeting will take place today at 5pm in AK116. Topics to be discussed include our faculty grievance processes and the continued erosion of our tenure lines at WPI.

3. Committee Report

Committee on Governance (COG): Reorganization of and Revisions to the Faculty Handbook: Focus of "Governance" and "Academic Appointments"

Prof. Albano (CEAE; COG Chair) and **Prof. Heineman** (CS; COG Sec.) focused on the Governance and Academic Appointments chapters of the draft of the reorganized Faculty Handbook. (See Addendum #1 on file with these minutes.) Appropriate sections of the draft have been modified based on feedback from those with whom the draft and sections of the draft have been shared. A special reading group consisting of COG representatives, two Deans, the Interim Provost, and two representatives from the Office of General Counsel has been working through the draft, as well.

Prof. Albano explained that the emphasis is on reorganization while improving clarity and usability. The reorganized information has been placed in five coherent chapters: Governance; Academic Appointments; Tenure; Promotion; and Faculty Grievance Procedure.

Prof. Albano described the organization of the Governance chapter. He identified the six sections of the draft Constitution, the ten draft Bylaws, and the various locations from where they originate in the current faculty handbook. All of this information is currently spread in different areas of the current handbook, and in the draft it is gathered in a way that is cohesive and easy to understand.

Prof. Albano also summarized clarifying information that is now included in the Governance content: a requirement that committees should review their descriptions every three years; clarifications about the general and specific

responsibilities of COG; explicit inclusion of the Educational and Research Councils; and explicit inclusion of the policy on creating, modifying, or eliminating academic programs and research facilities. He also summarized the information that has now been relocated elsewhere from the governance content: specific numerical goals for faculty populations by faculty category; partial information related to academic appointments; and operational elements of the tenure and promotion processes.

Prof. Heineman described the organization of the Academic Appointments chapter. He identified the eight sections (and two appendices) of the new draft chapter, and the various locations from where they originate in the current faculty handbook. All of this information is currently spread in different areas of the current handbook, and in the draft it is gathered in a way that is cohesive and easy to understand. He also summarized the clarifications that have been incorporated into the draft chapter: generalized wording to include Professors of Teaching as TTTs; inclusion of specific numerical goals for faculty populations by faculty category; inclusion of the Dean to review all new faculty appointments; clarification of terms and conditions to be included in letters of appointments for probationary faculty members; and clarification of minimum time limits on probationary faculty appointments. Prof. Heineman also described modified or added wording included to conform to accepted current practices: made explicit those who must review an initial appointment with tenure; defined terminal appointments; broadened materials submitted for annual DTC reviews to include documentation of all activities up to that date; placed review of the teaching of tenured faculty members at the discretion of each department; and allowed internal Department Head searches to go forward with only one candidate.

Prof. Heineman, Prof. Albano, and Prof. Richman reiterated the importance of receiving feedback, which can be provided in a variety of ways and can be directed to any member of COG.

Prof. Billiar (BME) asked if the reorganization would be approved in a single vote of the faculty. **Prof. Richman** explained that the project is seen as a reorganization with changes for clarity, simple improvements, and conformity with current practice that would have been highlighted before a vote. The hope is that on balance we can feel comfortable with the proposed reorganized structure and those highlights and see that the University and the faculty would be far better off if we were to jump ahead to the reorganized version and then work in the future to improve it further in incremental fashion.

4. Special Report

The Office of Diversity, Inclusion, and Multicultural Education (ODIME): The State of Our Black Students

Arnold Lane (Director of the Office of Diversity, Inclusion, and Multicultural Education - ODIME) introduced himself by noting that his office deals with student-facing diversity initiatives – from which he has a good view of the Black student experience at WPI. He is also co-leading the strategic planning group on the Black student experience and is here today to share some of what he has learned. (See Addendum #2 on file with these minutes.)

Mr. Lane shared his view that it is critical that all faculty members be thoroughly informed about our Black students. He promised to circulate the longer version of his presentation for further consideration. He began by identifying several problems: WPI's Black students are not persisting the way that they could; among undergraduates, NR rates are too high; graduation rates for Black students are too low, hovering around 60 percent at the undergraduate level; Black students lack a sense of belonging and community; and support for Black students is siloed in too few units at WPI. A lot of the work of supporting students is borne by Black faculty and staff, but Mr. Lane is concerned that his office is missing many students who need more support.

Mr. Lane called on his colleagues to help catch these students. There are a total of 143 Black undergraduate students at WPI, and 74 Black graduate students - half of whom are pursuing a Ph.D. He noted that between 2009 and 2021, 29 percent of Black M.S. students and 33 percent of Black Ph.D. students left WPI without a degree. He encouraged his colleagues to engage our students and help them complete their degrees. He provided data on NR rates for Black student in their first year at WPI. Last year, 35 out of 43 Black students NR'd one or more courses in their first semester. Noting the cost of excessive NRs, Mr. Lane encouraged the faculty to help students persist in their courses and avoid those costs. Mr. Lane also shared demographic data on first salaries after graduation, revealing strong disparities between the salaries of Black WPI graduates and other WPI graduates. He asked everyone to encourage their students to negotiate and utilize the Career Development Center. We tell our students that they will earn

\$80,000 per year after they graduate from WPI, but the data from 2022 indicates that the Black students who graduated with B.S. degrees earned only \$56,000.

Mr. Lane shared data from the 2022 Enrolled Student Survey, in which Black graduate students are more likely to experience inappropriate and disrespectful language within WPI, harassment or discrimination based on their race and ethnicity or gender identity, feelings of being unsafe on campus, perceptions that they need to work harder than some of their peers to be perceived as proficient, and the need to pull all-nighters to complete assignments.

He shared findings about the transition Black students experience when coming to WPI and the reasons they may not ask for help from faculty or support services. The transition also includes racism, mental health issues, and financial concerns. **Mr. Lane** called on all faculty members to think about what they can do individually and what WPI can do to better support these students.

Mr. Lane suggested that faculty members go out of their way to speak with Black students. He also asked everyone to incorporate student success strategies, showing students how to study for the material they are learning. He suggested that we must also address the hidden curriculum, those unspoken rules that historically have excluded people of color, first generation students, and low-income students because of what they don't know. He urged faculty members to notice when a Black student is absent or struggling and to reach out to them because they are unlikely to reach out to a white professor when they are struggling.

Mr. Lane added that we need to reassess the relationship students have with the WPI Plan. For some of WPI's Black students, the WPI Plan was less of a reason to come to WPI than the financial aid they received. He suggested that WPI's unstructured curriculum is a challenge to Black students, and faculty should take more care in seeing that they get the support they need. Finally, **Mr. Lane** recommended that faculty members undergo further training, and development – and he suggested watching the movie "Master". He suggested that we should all try to identify inclusive learning practices that we can use to promote student success, retention, and learning.

Prof. Murai (CS) asked if we can easily identify the Black students on our class rosters. **Mr. Lane** indicated demographic information can be pulled from Workday, and he can help those who wish to access it.

Prof. Sanbonmatsu (HUA) asked for the main reasons for the poor retention rate of our Black undergraduates. **Mr. Lane** suggested that the culture shock of being at WPI is overwhelming in the first few weeks, when there is no time to adjust before classes start. Racism is also real, and students experience microaggressions from their peers, faculty, and staff. Another reason is the price of attending; some students find they can't afford to stay here anymore.

Prof. Roberts (BBT) asked if the Connections program might ease the transition by bringing students to campus earlier. **Mr. Lane** explained that the program is open to all students, and it doesn't always include many of our Black students. Of this year's 110 Connections students, for example, only eight were Black. He added that Connections is designed to push students into affinity organizations and next year on-campus housing will include affinity housing. The hope is that Black students will take courses together, live together, and participate in some of the same programs together.

Prof. LePage (CEAE) observed that as a positive development she sees more students of color in her classroom now than even five years ago. She loves the diversity and appreciates all the work that is done in the ODIME. **Prof. LePage** asked if this presentation is available anywhere. **Mr. Lane** replied that it will be sent to all faculty and that more data will be shared in the future.

Michelle Borowski (Assistant Registrar) suggested we implement a big/little buddy mentoring program. **Mr. Lane** mentioned several challenges but noted that such a program is feasible.

Prof. Troy (BME) added that she is concerned about the NR data presented today. She spoke about sending numerous emails to students and getting no response. She asked if there are any mechanisms to encourage advisees to respond. **Mr. Lane** added that his office is experiencing the same phenomenon, but he encourages everyone to keep trying and to not take no for a simple answer.

Prof. Pollard (PH) asked if there are efforts to increase our Black student population and if the campus were ready for that. **Mr. Lane** thought that it would take one incoming class to really shift the culture here. The Black student population has been steady at 3 percent for 30 years. In his view, if we were to double the number of Black students

on this campus, conditions would change quickly because the students will let us know what is working and what is not working. However, he doesn't think WPI is doing enough to be ready for a sudden change of that magnitude.

Prof. Mortensen (CS) asked if we could develop systems to notify advisors when students receive a NR in a single class, not just when they receive two or more NRs in one term. **Mr. Lane** indicated that his office is doing its best to make that information available.

Prof. Rosewitz (CEAE) has had to send multiple emails to students before they respond when they are struggling. She recommends learning everyone's name in class to help them feel welcome. **Mr. Lane** added that we should also make the extra effort to pronounce their names correctly.

Prof. Brown (ECE) was concerned about the NRs and thought that we need to start thinking about how we talk about NRs, especially to economically disadvantaged students. While NRs are not academically punitive, they do have a financial impact. He also suggested that faculty members use the option of an Incomplete grade, instead. **Mr. Lane** agreed, adding that FAQ's are being added to websites to discourage misuse of the NR.

Prof. Fontenot (HUA) has been reaching out to her struggling students who are frequently absent or not turning in assignments. If they don't respond, she has been submitting the "Concerned about a Student" form that is directed to the CARE team. She has had a few students re-engage after this form was sent out, so anecdotally it seemed to her that the mechanism has been effective.

Dean Gericke (UGS) pointed out that the removal of SAT and ACT requirement for admission has not resulted in the increase in students of color we would like. Effective recruitment depends on both the financial offer and the welcoming environment of the campus during visits. Dean Gericke reiterated what Mr. Lane had said: we need to do better to help our Black students, who are academically strong but may struggle more than others. The advising office is tracking performance and is looking into software solutions that allow us to monitor in real time when a student is struggling in one or more courses. Dean Gericke reiterated Mr. Lane's call to keep an eye on these students to help identify problems as soon as possible. He encouraged everyone to ask for help if they are concerned about a student who will not respond.

Prof. Somasse (SSPS) pointed out that the Black students enrolling at WPI have the same credentials as all other students, but they have an added layer of struggle as they adjust to a predominantly white campus and experience microaggressions. Our job is to make the campus more welcoming so they don't have to deal with these extra distractions and can focus on their academic work.

6. President's Report

Prof. Richman introduced President Soboyejo by pointing out that in addition to the challenge of serving in an interim role, President Soboyejo met the challenges created as we emerged from COVID and recovered from our own unique institutional crisis. Prof. Richman praised President Soboyejo for his understanding of our campus, his ability to communicate well, his ability to take meaningful action, and his success at reconnecting the campus.

President Soboyejo thanked Prof. Richman and the rest of the faculty for the teamwork and support he has received over the past ten and a half months. President Soboyejo told the story of how he realized by talking to alumni that WPI was special because it was a place where students' lives are transformed by professors and staff members who take special interest in them as individuals. He explained that he had just such an experience with an English teacher who took an interest in him at a young age. President Soboyejo indicated that he would soon be asking the faculty to provide extended pathways with additional support for students who need extra attention as they make the transition to WPI.

President Soboyejo expressed his appreciation for Prof. Richman's knowledge of our current Faculty Handbook and his willingness to take on the task of rewriting it over the past year. Based on the extent to which the handbook has now been improved, President Soboyejo emphasized that the faculty, the administration, and the Board of Trustees now need to take ownership of the result as it is refined. To track the details of the reorganization of the document, Prof. Heineman has used his computer science skills to carry out a line-by-line analysis of the draft document. In addition, there is a reading group working together to analyze the draft, which is an example of WPI cooperation between the faculty, the administration, and the board to present a new version of the Faculty Handbook.

President Soboyejo acknowledged the efforts of VPR Vernescu as WPI flourishes as a \$50M per year research enterprise conducting research that makes a difference to people in the world. He cited the infrastructure at Sagamore Road for additive manufacturing, robotics, and recycling. At Gateway, renovations are underway to support additional educational activities. President Soboyejo sees WPI as an institution that is healthy as it emerges from COVID, and he urged us to continue to cooperate as we have in this past year and to keep our focus on our students.

President Soboyejo felt honored to serve as Interim President, looked forward to serving as Provost in the years ahead, and invited everyone to give their support to incoming President Wang.

7. Closing Announcements

Prof. Richman reminded all those in attendance that the next faculty meeting is only two-and-a-half weeks away on April 18th.

8. Adjournment

The meeting was adjourned at 4:52pm.

Respectfully submitted,

Mark Richman
Secretary of the Faculty

Addenda on file with these minutes:

Addendum #1 - COG Faculty Handbook Revisions - Minutes March 30 2023

Addendum #2 - State of Our Black Students - Minutes March 30 2023

Date: April 18, 2023
To: WPI Faculty
From: Committee on Governance
(Prof. Richman, Sec. of the Faculty; Prof. Albano, Chair, COG; Prof. Heineman, Sec., COG))
Re: Motion to adopt the reorganized Faculty Handbook

Motion: The Committee on Governance (COG) recommends and we move that the reorganized Faculty Handbook, distributed to the WPI Faculty and attached here, be adopted in place of the current Faculty Handbook updated as of July 1, 2022.

Description of the Motion:

The motion would replace the current (July 1, 2022) Faculty Handbook with the proposed reorganized Faculty Handbook attached to this motion.

Background/Rationale:

The WPI Faculty Handbook has always been updated carefully at the end of each academic year to incorporate the most recent changes and additions approved by the Faculty during that year. The current version in use since July 1, 2022 that is posted on the WPI Faculty Governance website: (<https://www.wpi.edu/sites/default/files/FacultyHandbook-July1%2C2022.pdf>) reflects all such changes through May 10, 2022.

However, while the Faculty Handbook is kept up-to-date and the changes and additions to it are vetted at every step by the Faculty and made in a manner consistent with the internal logic of each new change, the handbook has as a result evolved in a piecemeal fashion in which the changes could not be synthesized at every step. The result is that over an extended period of time, the current Faculty Handbook has become increasingly difficult to navigate. Information related to single topics and specific processes is oftentimes scattered throughout the handbook. Finding definitive answers to even simple questions is difficult because locating a single reference or even several scattered references to the matter of interest may not tell the whole story.

Furthermore, as the University, its academic programs, and our faculty composition and structures have become increasingly complex, the need to make repeated and continuous changes and additions to the Faculty Handbook has increased dramatically in the past ten to fifteen years. This phenomenon has accelerated the rate at which confusion about old, new, and changing policies and procedures in the handbook has compounded. And, while the handbook was substantially improved when it was last reformatted in May 2005, many important rules and procedures, especially those related to governance, academic appointments and tenure remained in their original forms as ad hoc appendices and procedural amendments added in the late 1960s. So even the *starting point* for the many modifications that have been made to the handbook since 2005 was itself not entirely well synthesized.

The proposed structure of the reorganized Faculty Handbook brings together and weaves together related content that is oftentimes located in disparate parts of the current faculty handbook. The content that has been significantly reorganized in the draft has been unified within five broad themes: Governance; Academic Appointments; Tenure; Promotions; and a Faculty Grievance Procedure. In this manner, the content is presented in a more logical order that is self-explanatory, self-contained, and much easier to follow. As a result, the draft functions better as a source of information for non-experts and experts alike, and it is amenable to much clearer interpretation for all users.

The reorganized Faculty Handbook is put forward to the Faculty as a vast improvement over the current version and as a document that will make it much easier to have future discussions about how we can further refine our faculty policies and processes. However, no project of this magnitude and complexity can repair all the defects of our current Faculty Handbook, and no organizational scheme or set of interpretations will ever satisfy everyone perfectly. Instead, by establishing a unified, synthesized baseline for our current

policies, and by eliminating much of the confusion about what those policies and processes currently mean and where exactly they can be found, the reorganized Faculty Handbook will serve to identify and clarify the broad and the technical issues as well as the gaps we need to address to make them better.

In this sense, the reorganized faculty handbook is presented, not as an endpoint, but as a new starting point for discussions among the Faculty that may well be complex based on substantive matters but should not be unnecessarily complicated by confusions among us created by a disorganized foundation.

General Approach:

The overwhelming emphasis of the work done to produce the current draft version of the Faculty Handbook has been on reorganizing current content rather than incorporating any substantive changes to current policy or accepted current practice. This has been done in several smaller steps:

- Reordering entirely unchanged sections;
- Combining parts of existing sections;
- Reorganizing content within existing sections;
- Extracting elements from different sections and recombining them into new sections and subsections. This sometimes involved weaving together related but separated subsections, paragraphs, and sentences.

In order to maintain focus on reorganizing the handbook rather than on making substantive changes, COG adopted the following working hierarchy of possible modifications:

- Pure reorganization and the moving of whole sections - which involved no changes in text;
- Necessary editorial, stylistic, and grammatical changes – which were needed to patch adjacent elements together and to reformat appropriately;
- Corrections to obvious inconsistencies;
- Helpful clarifications – which involved changing or adding text for better and easier understanding without changing substance;
- Simple process improvements – which involved adding text without changing the effect of current policy;
- Documentation of accepted current practices not yet formally adopted in the current handbook – which involved changing text to update the handbook to conform to established current practices.

The Structure of the Reorganized Faculty Handbook:

As a result of the approach outlined above, the reorganized Faculty Handbook is currently divided into two parts, each with five chapters.

Part One of the reorganized Faculty Handbook contains the content that has been substantially reorganized in the following five separate chapters:

- Chapter One: Governance
- Chapter Two: Academic Appointments
- Chapter Three: Tenure
- Chapter Four: Promotions
- Chapter Five: Faculty Grievance Procedure

A more detailed overview of the contents of each chapter is provided in table-form in five separate Appendices attached to this motion. Those tables also contain **high-level mappings** that describe the original location (in the current faculty handbook) of content that has been placed in individual chapters and sections of chapters in the reorganized Faculty Handbook.

Part Two of the reorganized Faculty Handbook contains the content that has been placed unchanged as it currently appears in the current Faculty Handbook (although reordered) in the following five chapters:

- Chapter Six: Policies Regarding Academics and Academic Programs
- Chapter Seven: Awards and Awards Committees
- Chapter Eight: Certain Policies on Faculty Benefits and Opportunities
- Chapter Nine: Certain Legal Policies
- Chapter Ten: Faculty Conduct Policies

Iterative Reorganization Process and Timeline:

The iterative process used to produce the current draft of the reorganized Faculty Handbook has welcomed feedback and input at every stage described below and has proceeded according to the following ongoing timeline:

- Summer 2022:
 - Prepared preliminary drafts of Governance, Academic Appointments, Tenure, Promotions, and Faculty Grievance chapters;
 - Shared relevant drafts with Chairs of:
 - COG (Prof. Albano) – all chapters
 - CTAF (Prof. Claypool and Prof. Mathews)
 - COAP (Prof. Skorinko and Prof. Strauss)
- Fall 2022:
 - Reviewed extensively by COG (including Provost Heinricher) for:
 - Section-by-section modifications
 - Accuracy and consistency checks
 - Clarifications
 - Shared evolving versions of each chapter with President Soboyejo
 - Shared evolving versions of each chapter with Office of General Counsel
- Spring 2023 (January to March):
 - Shared Governance chapter with Committee Chairs (January 2023);
 - Shared updated relevant chapters with CTAF, COAP, and CTRF (January 2023);
 - Distributed full draft to the Faculty (February 2023);
 - Provided overviews at faculty meetings (Feb. 2 and Mar. 6);
 - Convened a reading group (including the Secretary of the Faculty, the Chair of COG, the Secretary of COG, the Provost, and the Associate Dean of the Global School, and the Office of University Counsel) to re-verify in detail that the reorganized draft of the Faculty Handbook is consistent with the sensibility and constraints described above under General Approach (March 2023).
- Spring 2023 (March to May):
 - Welcome, discuss, and incorporate continuous feedback from all individuals, committees, groups as it is received and processed;

- Provide overview of Governance and Academic Appointments chapters at March 30, 2023 faculty meeting;
- Provide overview on Tenure and Promotions chapters at April 18, 2023 faculty meeting;
- Disseminate final motion to adopt the reorganized Faculty Handbook for consideration at the May 9, 2023 faculty meeting.

Chapter-by-Chapter Outline of Notable Improved Features:

The following outline itemizes the features that have been incorporated into the reorganized Faculty Handbook consistent with the constraint that no change introduces a substantive new effect:

1. Chapter One: Governance

a. Included in Reorganized Governance Content:

- i. In Bylaw Two: General Rules for Committees of the Faculty*
 - Committees should review their roles and responsibilities, and membership every three years.
 - Improves practice – will be initiated after Faculty Handbook reorganization effort
- ii. In Bylaw Three: Roles and Responsibilities, and Membership of Standing Committees*
 - Committee on Governance
 - Clarifies: “COG coordinates its efforts and those of all other faculty governance committees in the formulation of recommendations on changes to all parts of the Faculty Handbook.”
 - Co-locates: Responsibility to disseminate and present an annual report on WPI’s faculty population by faculty category.
 - Co-locates: Responsibility to review, refer, and present proposals from the Administration to create, merge, realign, or eliminate academic programs, academic departments, or major academic or research facilities.
 - Fringe Benefits Committee
 - Relocated: As a permanent subcommittee under the Committee on Financial and Administrative Policy
- iii. (New) Bylaw Six: Educational and Research Councils*
 - Relocated from Part Two, Section 5: More parity with our established committees and sub-committees
- iv. (New) Bylaw Ten: Policy on Creating, Merging, Realigning or Eliminating Academic Programs, Academic Departments, and Research Facilities*
 - Relocated from Part Two, Section 5: Consistent with COG’s responsibilities in Bylaw Three

b. Moved from Governance Content:

- i. Numerical goals for faculty populations by faculty category*
 - From Part One, Appendix D: The Roles and Balance of the Faculty in Carrying Out WPI’s Mission
 - Moved to Chapter Two: Academic Appointments – where categories are defined
- ii. Partial information related to probationary appointments, dismissals, and resignations*
 - From Part One, Appendix A. A: Report of the Ad Hoc Tenure Committee, General Procedural Matters
 - Moved to Chapter Two: Academic Appointments – where all appointment information is centralized.
- iii. Operational elements of tenure process: (e.g., DTCs, JTCs, Recusals, Conf. of Interest, Tenure Clock)*
 - From Part One, Bylaw One. V: Committee on Tenure and Academic Freedom

- From Part One, Appendix A: Report of the Ad Hoc Tenure Committee (Subsections A, B, and D: General Procedural Matters; Procedure for Granting Tenure; and Procedural Amendments)
 - Moved to Chapter Three: Tenure – where all tenure information is centralized.
- iv. Operational elements of promotions process: (e.g., Nominator, Advocate, JPCs, Recusals)*
- From Part One, Bylaw One, V: Committee on Appointments and Promotions
 - Moved to Chapter Four: Promotions – where all promotions information is centralized.

2. Chapter Two: Academic Appointments

a. Modified/Added Wording to Conform to Accepted Current Practice:

- i. Formalizes the administrative review process for faculty appointments with tenure:*
 - “An initial appointment of a faculty member with tenure is reviewed by the Department Head, the Dean of the appropriate school, and the Provost.”
 - Uses a generalization of the review process for probationary appointments
- ii. Defines “Terminal Appointments” (when tenure is not granted):*
 - Appointments for one additional year at current rank and title on schedule used for regular reappointments
- iii. Broadens materials submitted for annual DTC review of probationary faculty:*
 - Materials submitted to DTCs for annual reviews will document faculty members’ efforts “**up to that date**” rather than just “**for the preceding year...**”
- iii. Aligns our policy with our practice of reviewing the teaching of tenured faculty members:*
 - Formation and reviews of teaching by **Departmental Peer Review Committees - at the discretion of each department** rather than **required**.
- iv. Allows internal Department Head searches to go forward with only one candidate:*

b. Incorporated Process Clarifications/Improvements:

- i. Adds the “appropriate Dean” explicitly in place to review of all new probationary appointments.*
- ii. Clarifies “terms and conditions” to be included in letters of appts. for probationary faculty:*
 - Rank, title, and probationary status;
 - Year of scheduled mandatory tenure review and number of years credit on the tenure clock;
 - Statement that probationary faculty at the assoc. rank should first achieve tenure before seeking promotion to full rank.

c. Broadened/Generalized Wording to include Professors of Teaching as TTTs:

- i. Includes/adds “continuing professional growth and currency,” etc., as appropriate*
- ii. Allows credit on the tenure clock for full-time academic experience while at WPI*

d. Included Explicit Numerical Goals Concerning Faculty Categories:

- i. Originates from Part One: Appendix D of Current Faculty Handbook*

e. Clarified Minimum Time on a Probationary Appointment Before Tenure Review:

- i. At the assistant rank, minimum time = three years*
 - Because promotion to associate rank is granted when tenure is granted; AND three years required (in the same track) prior to review for promotion to associate rank
- ii. At the associate or full rank, minimum time = two years*
 - No probationary faculty member may serve less than two years on the tenure clock prior to tenure review

3. Chapter Three: Tenure

a. **Modified/Added Wording to Conform to Accepted Current Practice:**

- i. *Assistant Profs. and Assistant Profs. of Teaching receive a combined review for tenure and promotion:*
 - Recognizes that tenure criteria and promotion criteria are the same;
 - Eliminates the possibilities of contradictory and/or moot/untenable CTAF deliberations;
 - Avoids confusions created by permitting an undesirable possibility;
 - Aligns with rationale for changes to tenure and promotion made over 20 years ago.
- ii. *Department Head given responsibility for writing JTC letter of recommendation in the case of a negative tenure recommendation:*
 - Consistent with Dept. Head's responsibility in the case of a positive recommendation.
- iii. *Provost's annual list of probationary faculty members to include only relevant information:*
 - Year of scheduled tenure review;
 - Exact title rank/title and department/program affiliation;
 - Eliminates "...conditions attached to probationary appointment..."
- iv. *Requirement for JTCs to file minutes with SOF by May 1 – eliminated*
 - Because JTC deliberations are confidential and final tenure decisions are made known to the community soon after Board of Trustees' vote in late February.
- v. *Replacement process for JTC member who resigns – clarified*
 - Same as process used for recusals due to dept affiliation and/or conflict of interest.

b. **Incorporated Process Improvements**

- i. *Clarity about the effect of tenure clock stoppages on individual faculty members:*
 - Provost must send letter to faculty candidate with new date of scheduled tenure review;
 - New date of tenure review must be stated in reappointment letters.
- ii. *Timely formation of Joint Tenure Committees for interdisciplinary candidates:*
 - JTCs should be formed in the year before the tenure review rather than during the year of the tenure review – to allow for preliminary gathering of external letters of reference, etc.
- iii. *Provost's annual list of probationary faculty members includes only relevant information:*
 - Includes: Year of scheduled tenure review;
 - Includes: Exact title rank/title and department/program affiliation;
 - Eliminates: "...conditions attached to probationary appointment..."

c. **Provided Clear/Explicit Definitions of Probationary Periods, Tenure Clock, and Tenure Review Timing;**

- i. *Probationary period* - refers to the *total* time served at WPI as a *tenure-track faculty* member regardless of whether the tenure clock is running or is stopped, including time served during the academic year of the tenure review.
- ii. *Tenure Clock* - The tenure clock measures the five years that must be accumulated prior to the academic year of the mandatory tenure review. Time is accumulated on the tenure clock in only two ways: through actual time served as a tenure-track faculty member at WPI while the

- tenure clock is running; and through time credited on the tenure clock at the time of the initial tenure-track probationary appointment.
- iii. Mandatory Tenure Review* - conducted for all tenure-track probationary faculty members in the academic year immediately after they have accumulated five years on the tenure clock.
- d. Clarified elements of the process for early tenure for special contributions by the faculty member:**
- i. Must be consistent with minimum allowable probationary period;*
 - ii. Must meet same (April 15) deadline as all other tenure cases.*
- e. Clarified elements of the process for early tenure when the academic freedom of a probationary faculty member is in jeopardy**
- i. Candidate is “invited” rather than required to apply for tenure;*
 - ii. Tenure (if) granted to an Assistant Professor/Assistant Professor of Teaching includes promotion to associate rank.*
- g. Broadened/Generalized Wording to include Professors of Teaching as TTTs:**
- i. Includes/adds “continuing professional growth and currency,” etc., as appropriate*
 - ii. Allows credit on the tenure clock for full-time academic experience while at WPI*

4. Chapter Four: Promotions

a. Modified/Added Wording to Conform to Accepted Current Practice:

- i. Assistant Profs. and Assistant Profs. of Teaching receive a combined review for tenure and promotion:*
 - Recognizes that tenure criteria and promotion criteria are the same;
 - Eliminates the possibilities of contradictory and/or moot/untenable CTAF deliberations;
 - Avoids confusions created by permitting an undesirable possibility;
 - Aligns with rationale for changes to tenure and promotion made over 20 years ago.
- ii. All Associate Professors and Associate Professors of Teaching should first achieve tenure before seeking promotion to the full rank:*
 - Clarifies for consistency between the two tracks and with long standing practice.
- iii. Procedures and dossier format for promotion to Associate Teaching Professor and (full) Teaching Professor explicitly follow those described in detail for promotion to (full) Professor and (full) Professors of Teaching:*
 - With differences for (full) Professors and (full) Professors of Teaching highlighted;
- iv. Letter of recommendation in promotion cases:*
 - Signed by voting members of the Joint Promotion Committee, only;
 - Forwarded directly to the Provost, only.
- v. "Standards for Evaluation of the Promotion Dossier" apply to all reviewers:*
 - Explicitly identifies Joint Promotion Committee Members, Provost, and peer reviewers;

b. Simplified how credit for time-in-rank is documented and considered in timing of promotions:

- i. Covered by date of mandatory tenure review and time on the tenure clock for probationary faculty;*
- ii. Covered more flexibly by promotion eligibility guidelines in faculty handbook for tenured faculty and non-tenure track faculty.*

c. Broadened/generalized wording throughout to be consistent with expectations of the teaching faculty.

5. **Chapter Five: Faculty Grievance Procedure**

- a. **Clarified that existing provisions for cases of non-renewal of probationary appointments also apply to non-renewal and termination of appointments of secured nontenure-track faculty members on 3-year and 5 (or more)-year contracts:**
 - i. *Deadline to file;*
 - ii. *Requirement that the FRC first request and receive a finding from CTAF.*
- b. **Clarified role of Provost and President when either person has a conflict of interest.**

APPENDIX ONE: Contents and Mapping of Chapter One
GOVERNANCE

CONTENTS and MAPPING: CHAPTER ONE, CONSTITUTION
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL CONSTITUTION LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
CONSTITUTION CHAPTER ONE: SECTION ONE Definition and Governance of the Faculty	Part One: Section One Definition of the Faculty; Governance of the Faculty
CONSTITUTION CHAPTER ONE: SECTION TWO Duties, Responsibilities, Authority, and Academic Freedom of the Faculty	Part One: Section Two Duties, Responsibilities, Authority, and Academic Freedom of the Faculty
	Part Two: Section 1.A Academic Freedom and Tenure
CONSTITUTION CHAPTER ONE: SECTION THREE The Roles and General Balance of the Faculty in Carrying Out WPI's Mission	Part One: Appendix D The Roles and Balance of the Faculty in Carrying Out WPI's Mission
CONSTITUTION CHAPTER ONE: SECTION FOUR Faculty Meetings	Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection II: Faculty Meetings</i> <i>-Subsection IV: Rules Governing Committees Item: I</i>
CONSTITUTION CHAPTER ONE: SECTION FIVE Committees of the Faculty	Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection III: Committees of the Faculty</i> <i>-Subsection IV: Rules Governing Committees Items: G & J</i>
CONSTITUTION CHAPTER ONE: SECTION SIX Amending the Constitution of the WPI Faculty	Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection I: Amending the Constitution and Adopting Bylaws</i>

CONTENTS and MAPPING: CHAPTER ONE, BYLAWS ONE TO THREE
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL BYLAW LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p style="text-align: center;">BYLAWS</p> <p style="text-align: center;">CHAPTER ONE: BYLAW ONE General Standing Rules for Faculty Meetings</p>	<p>Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection II: Faculty Meetings</i></p>
	<p>Part One: Bylaw Seven Standing and Special Rules of Order <i>-Subsection I: Standing Rule of Order One</i> <i>-Subsection II: Special Rule of Order One</i> <i>- Subsection III: Special Rule of Order Two</i></p>
<p style="text-align: center;">BYLAWS</p> <p style="text-align: center;">CHAPTER ONE: BYLAW TWO General Rules for Committees of the Faculty</p>	<p>Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection IV: Rules Governing Committees Items: Intro; A; B; C; D; F; G; H; K; and L</i></p>
	<p>Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty <i>- Introduction</i></p>
	<p>Part One: Bylaw Five Secretary of the Faculty</p>
	<p>New Committees review their charges regularly</p>
<p style="text-align: center;">BYLAWS</p> <p style="text-align: center;">CHAPTER ONE: BYLAW THREE Roles, Responsibilities, and Membership of Standing Committees and Sub-Committees of the Faculty</p>	<p>Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty <i>-Subsections: I; I.a; II; III; IV; V; VI; VII; VIII; IX; X</i></p>
	<p>Part One: Appendix D The Roles and Balance of the Faculty in Carrying Out WPI's Mission</p>
	<p>Part Two: Section 2.D Policy on Initiating and Terminating Departments and Programs</p>
	<p>Part Two: Section 3.F The Fringe Benefits Committee</p>

CONTENTS and MAPPING: CHAPTER ONE, BYLAWS FOUR TO SIX
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL BYLAW LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
BYLAWS CHAPTER ONE: BYLAW FOUR Election Procedures for Committees of the Faculty	Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty <i>-Subsections: I; V; VI; and IX</i>
	Part One: Bylaw Three Elections of Committees of the Faculty
	Part One: Bylaw Four Unexpired Terms – Appointment and Election of Replacements
	Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection IV: Rules Governing Committees Item E</i>
	Part One: Appendix A Report on the Ad Hoc Tenure Committee <i>-Subsection B: Procedure for Granting Tenure</i> <i>Sub-section 2: Joint Tenure</i>
BYLAWS CHAPTER ONE: BYLAW FIVE Appointments by the Provost and the President to the Standing Committees and Sub-Committees of the Faculty	Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty <i>-Subsections: I; I.a; VIII; and IX</i>
	Part One: Bylaw Two Appointments of Representatives of the Provost’s Office to Serve on the Five Standing Committees: CAP, CAO, CASL, CGSR, and UOAC
BYLAWS CHAPTER ONE: BYLAW SIX Development Councils for Education and Research	Part Two: Section 5.A Educational Development Council
	Part Two: Section 5.B Research Development Council

CONTENTS and MAPPING: CHAPTER ONE, BYLAWS SEVEN to TEN (and APPENDIX)
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL BYLAW LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">BYLAWS</p> <p>CHAPTER ONE: BYLAW SEVEN Secretary of the Faculty</p>	<p>Part One: Bylaw Five Secretary of the Faculty</p> <hr/> <p>Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty <i>-Subsection: I</i></p> <hr/> <p>Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection IV: Rules Governing Committees</i> <i>Item F</i></p>
<p align="center">BYLAWS</p> <p>CHAPTER ONE: BYLAW EIGHT Membership of Faculty on Committees of the WPI Board of Trustees and Faculty Participation at Board of Trustees' Meetings</p>	<p>Part One: Bylaw Six Membership of Faculty on Committees of the WPI Board of Trustees and Faculty Participation at Board of Trustees' Meetings</p>
<p align="center">BYLAWS</p> <p>CHAPTER ONE: BYLAW NINE Adopting and Amending Bylaws of the WPI Faculty</p>	<p>Part One: Section Three General Rules and Procedures for Academic Governance <i>-Subsection I: Amending the Constitution and Adopting Bylaws</i></p>
<p align="center">BYLAWS</p> <p>CHAPTER ONE: BYLAW TEN Policy on Creating, Merging, Realigning or Eliminating Academic Programs, Academic Departments and Research Facilities</p>	<p>Part Two: Section 2.D Policy on Initiating and Terminating Departments and Programs</p>
<p align="center">BYLAWS</p> <p align="center">APPENDIX</p> <p>The Instant Run-Off Voting (IRV) Method</p>	<p>Part One: Appendix C Description of the Instant Run-Off Voting Method</p>

APPENDIX TWO: Contents and Mapping of Chapter Two
ACADEMIC APPOINTMENTS

CONTENTS and MAPPING: CHAPTER TWO, ACADEMIC APPOINTMENTS - SECTIONS 1 and 2
of Reorganized Faculty Handbook
from Current Faculty Handbook

LOCATION OF SECTIONS 1 AND 2 IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p>1. Categories, Titles, and Roles of Faculty members at WPI</p> <ul style="list-style-type: none"> a. The Roles and Titles of the Tenured and Tenure-Track Faculty b. Categories, Titles, and Roles of Nontenure-Track Faculty <ul style="list-style-type: none"> i. Secured nontenure-Track Teaching Faculty ii. Short-term Nontenure-Track Teaching Faculty iii. Nontenure-Track Research Faculty iv. Adjunct Nontenure-Track Faculty v. Others with Teaching and Research Responsibilities at WPI 	<p>Part One: Appendix D The Roles and Balance of the Faculty in Carrying Out WPI’s Mission</p> <hr/> <p>Part Two: 7, A + B Categories of Faculty members at WPI</p>
<p>2. Balance of the Faculty at WPI: Faculty Populations</p>	<p>Part One: Appendix D The Roles and Balance of the Faculty in Carrying Out WPI’s Mission</p>

**CONTENTS and MAPPING: CHAPTER TWO, ACADEMIC APPOINTMENTS - SECTIONS 3 and 4
of Reorganized Faculty Handbook
from Current Faculty Handbook**

LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p>3. Policies on Tenured and Tenure-Track Faculty Appointments</p> <ul style="list-style-type: none"> a. Probationary Appointments and Periods, Initial Appointments, Reappointments, Reviews, Non-Reappointments, Terminal Appointments, and Resignations of Tenure-Track Faculty Members b. Initial Appointments, Resignations, and Terminations of Faculty Members with Tenure 	<p>Part One: Appendix A, A, General Procedural Matters</p> <ul style="list-style-type: none"> 1. Applicability 2. Limitations on time in service for probationary appointment 3. Notice and policy for dismissal and resignation <hr/> <p>Part Two, I, B: Appointments and Reappointments of Tenure Track Faculty</p> <ul style="list-style-type: none"> 1. Initial Appointment 2. Periodic Review 3. Reappointment <hr/> <p>Part Two, I, D. 3 Procedures for Promotion Nomination and Review</p> <p>1 Eligibility and Time in Rank for Tenured and Tenure-Track Faculty</p> <hr/> <p>Part Two, I, G. Review of Tenured Faculty</p>
<p>4. Appointment, Reappointment, and Review of nontenure-track Faculty Members</p> <ul style="list-style-type: none"> a. Secured Nontenure-Track Teaching Faculty b. Secured Nontenure-Track Teaching Faculty c. Short-term Nontenure-Track Teaching Faculty d. Nontenure-Track Research Professors 	<p>Part Two, 8, Appointment, Reappointment, and Review of Nontenure-Track Faculty Members</p> <ul style="list-style-type: none"> A. Secured Nontenure-Track Teaching Faculty B. Secured Nontenure-Track Teaching Faculty – Professors of Practice C. Short-term Nontenure-Track Teaching Faculty D. Nontenure-Track Research Professors <hr/> <p>Part Two, 9: Procedures and Criteria for Reappointment or Professors or Practice</p>

CONTENTS and MAPPING: CHAPTER TWO - SECTIONS 5 to 8
of Reorganized Faculty Handbook
from Current Faculty Handbook

LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
5. Roles and Responsibilities, Initial Appointments, Reviews, and Reappointments of Department Heads <ul style="list-style-type: none"> a. Roles and Responsibilities b. Initial Appointment c. Performance Reviews d. Reappointment 	Part Two: I, C: Department Heads <ul style="list-style-type: none"> 1. Appointment of Department Heads 2. Performance Evaluation of Department Heads 3. Reappointment of Department Heads
	Part Two, I, D. 3 Procedures for Promotion Nomination and Review 1 Eligibility and Time in Rank for Tenured and Tenure-Track Faculty
	Part Two, I, G. Review of Tenured Faculty
6. Guidelines for Searches to fill Academic Administrative Positions <ul style="list-style-type: none"> a. Academic Administrative Positions b. Formation of the Search Committee c. Conducting the Search d. Evaluating the Candidates 	Part Two, I: Guidelines for Searches to Fill Academic Administrative Positions
7. Definitions, Conditions, and Procedures for Faculty Joint Appointments <ul style="list-style-type: none"> a. Dual Appointment b. Collaborative Appointment c. Procedure to Establish a Faculty Joint Appointment 	Part Two, H: Definitions of Joint Appointments of Tenured and Tenure-Track Faculty
8. Policy on Leaves <ul style="list-style-type: none"> a. Sabbatical Leaves b. Unpaid Leaves 	Part Two: 3, C: Policy on Sabbatical Leaves <ul style="list-style-type: none"> 1. Basic Objectives 2. Financial Arrangements 3. Procedures for Review and Award
	Part Two, 3, E: Unpaid Leaves

APPENDIX THREE: Contents and Mapping of Chapter Three
TENURE

CONTENTS and MAPPING: CHAPTER THREE, TENURE – SECTION 1
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL CONSTITUTION LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">Section 1</p> <p align="center">Eligibility and Conditions for Tenure, Probationary Periods, and Mandatory Tenure Reviews</p>	<p>Part One: Bylaw One Membership, Duties, Responsibilities of the Standing Committees of the Faculty Section V: Committee on Tenure and Academic Freedom</p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section A: General Procedural Matters <i>Subsection 1: Applicability</i> <i>Subsection 2: Limitations on time in service for probationary appointments</i></p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section B: Procedure for Granting Tenure <i>Subsection 1: Policy</i></p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section A: Academic Freedom and Tenure <i>Subsection: Tenure</i> <i>- Eligibility and Conditions for Tenure</i></p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section B: Appointments and Reappointments of Tenure-Track Faculty <i>Subsection 1: Initial Appointment</i></p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section D.3: Promotion <i>Subsection 1: Eligibility and Time in Rank for Tenured and Tenure-Track Faculty</i></p>

CONTENTS and MAPPING: CHAPTER THREE, TENURE - SECTIONS 2 to 4
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL CONSTITUTION LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p style="text-align: center;">Section 2</p> <p style="text-align: center;">The Tenure Clock</p> <p>a. Starting and Running the Tenure Clock</p> <p>b. Stopping the Tenure Clock</p> <p>c. Early Tenure Review Prior to the Scheduled Tenure Review</p>	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section A: General Procedural Matters <i>Subsection 2: Limitations on time in service for probationary appointments</i></p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section D: Procedural Amendments</p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section A: Academic Freedom and Tenure <i>Subsection: Stopping the Tenure Clock</i></p> <ul style="list-style-type: none"> - <i>New Child Provision</i> - <i>Unpaid Leaves and Part-time Employment</i> - <i>Effect on Tenure Review</i>
<p style="text-align: center;">Section 3</p> <p style="text-align: center;">The Tenure Criteria</p> <p>a. Tenure Criteria for Associate and (full) Professors</p> <p>b. Tenure Criteria for Associate and (full) Professors of Teaching</p> <p>c. Guidance for Documenting and Assessing Activities Toward Tenure for Professors of Teaching</p>	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section A: Academic Freedom and Tenure <i>Subsection: Tenure</i></p> <ul style="list-style-type: none"> - <i>Tenure Criteria for Assoc. and full Professor</i> - <i>Tenure Criteria for Assoc. and full Professors of Teaching</i> - <i>Guidance for Documenting and Assessing Activities Toward Tenure for Professors of Teaching</i>
<p style="text-align: center;">Section 4</p> <p style="text-align: center;">Department Tenure Committees</p>	<p>Part One: Bylaw One Membership, Duties, Responsibilities of the Standing Committees of the Faculty Section V: Committee on Tenure and Academic Freedom</p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section B: Procedure for Granting Tenure <i>Subsection 2: Joint Tenure</i></p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section D: Procedural Amendments</p>

CONTENTS and MAPPING: CHAPTER THREE, TENURE – SECTIONS 5 to 6
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">Section 5 Joint Tenure Committees</p>	<p>Part One: Bylaw One Membership, Duties, Responsibilities of the Standing Committees of the Faculty Section V: Committee on Tenure and Academic Freedom</p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section B: Procedure for Granting Tenure <i>Subsection 2: Joint Tenure</i></p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section A: Academic Freedom and Tenure <i>Subsection: Tenure</i> <i>- Introduction</i></p>
<p align="center">Section 6 Joint Tenure Committees for Interdisciplinary Candidates</p>	<p>Part One: Bylaw One Membership, Duties, Responsibilities of the Standing Committees of the Faculty Section V: Committee on Tenure and Academic Freedom</p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section B: Procedure for Granting Tenure <i>Subsection 2: Joint Tenure</i></p>

CONTENTS and MAPPING: CHAPTER THREE, TENURE- SECTION 7
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">Section 7</p> <p align="center">Tenure Procedures</p> <p>a. General Overview</p> <p>b. Procedures for Tenure Reviews, Recommendations, Final Decisions, and Appeals</p>	<p>Part One: Bylaw One Membership, Duties, Responsibilities of the Standing Committees of the Faculty Section V: Committee on Tenure and Academic Freedom</p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section B: Procedure for Granting Tenure <i>Subsection 1: Policy</i> <i>Subsection 2: Joint Tenure</i></p>
	<p>Part One: Appendix A Report of the Ad Hoc Tenure Committee Section D: Procedural Amendments</p>
	<p>Part Two: Section 1 Policies Regarding the Status of Faculty Section A: Academic Freedom and Tenure <i>Subsection: Tenure</i></p> <ul style="list-style-type: none"> - <i>Introduction</i> - <i>Eligibility and Conditions for Tenure</i> - <i>Procedures for Tenure</i>

**APPENDIX FOUR: Contents and Mapping of Chapter Four
PROMOTIONS**

**CONTENTS and MAPPING: CHAPTER FOUR, PROMOTION – SECTION 1
of Reorganized Faculty Handbook
from Current Faculty Handbook**

FINAL CONSTITUTION LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">Section 1</p> <p>Eligibility, Time in Rank, and Conditions for Promotion</p> <p>a. Eligibility, Time in Rank, and Conditions for Promotion of Tenured and Tenure-Track Faculty</p> <p>b. Eligibility, Time in Rank, and Conditions for Promotion of Nontenure-Track Faculty</p>	<p>Part Two, Section 1.D: Promotion</p> <p>D.3.1 Eligibility and Time in Rank for Tenured and Tenure-Track Faculty</p> <p>Part Two, Section 10, Promotion Procedures and Criteria for NonTenure-Track Faculty</p> <p>A. Promotion to Senior Instructor from Instructor or to Assistant Teaching Professor from Instructor (of either level)</p> <p>B. Criteria for Promotion to Associate Teaching Professor</p> <p>C. Criteria for Promotion to (full) Teaching Professor</p> <p>D. Promotion to Associate Research Professor</p> <p>E. Promotion to Full Research Professor</p>

CONTENTS and MAPPING: CHAPTER FOUR, PROMOTION – SECTIONS 2 to 3
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL CONSTITUTION LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p style="text-align: center;">Section 2</p> <p style="text-align: center;">Promotion Criteria</p> <p>a. Criteria for Promotion of Tenured and Tenure-Track Dual Mission Faculty</p> <p>b. Criteria for Promotion of Tenured and Tenure-Track Teaching Faculty</p> <p>c. Criteria for Promotion of Secured Teaching Faculty</p> <p>d. Criteria for Promotion of Research Faculty</p>	<p>Part Two: Section 2, 1.D. Promotion</p> <p>D.1.1 The Criteria for Promotion to Associate and full Professor</p> <p>D.1.2. Definition of Scholarship</p> <p>D.2.1. Criteria for Promotion in the Professor of Teaching Track</p> <p>D.2.2. Definition of Teaching Practice, Professional Growth and Currency</p> <p>Part Two: Section 10, Promotion Procedures and Criteria for Nontenure-Track Faculty</p> <p>A. Promotion to Senior Instructor from Instructor or to Assistant Teaching Professor from Instructor (of either level)</p> <p>B. Promotion to Associate Teaching Professor</p> <p>C. Promotion to (full) Teaching Professor</p> <p>D. Promotion to Associate Research Professor</p> <p>E. Promotion to (full) Research Professor</p>
<p style="text-align: center;">Section 3</p> <p style="text-align: center;">Promotion Procedures: to (full) Professor; (full) Professor of Teaching; (full) Teaching Professor; Associate Teaching Professor</p> <p>a. Process</p> <p>b. The Promotion Dossier</p>	<p>Part Two: Section 2, 1. D. Promotion</p> <p>D.1.3. Documentation in the Dossier for Promotion to full Professor</p> <p>D.1.4. Standards for Evaluation of the Dossier for Promotion to full Professor: Quality, Impact and Peer Review</p> <p>D.2.3 Documentation in the Dossier for Promotion to full Professor of Teaching</p> <p>D.2.4. Standards for Evaluation of the Promotion Dossier: Quality, Commitment, Impact and Peer Review</p> <p>D.3.2 Nomination and the Formation of a Joint Promotion Committee</p> <p>D.3.3. Selection of Internal and External Peer Reviewers</p> <p>D.3.5 Review by the Joint Promotion Committee, Dean, and Provost</p> <p>Bylaw One Membership, Duties, and Responsibilities of the Standing Committees of the Faculty</p> <p>VI. The Committee on Appointments and Promotions (COAP)</p>

CONTENTS and MAPPING: CHAPTER FOUR, PROMOTION – SECTIONS 4 to 5
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
<p align="center">Section 4 Promotion Procedures: to Senior Instructor; Assistant Teaching Professor; Associate Research Professor; and (full) Research Professor</p>	<p>Part Two: Section 10, Promotion Procedures and Criteria for Nontenure-Track Faculty A. Promotion to Senior Instructor from Instructor or to Assistant Teaching Professor from Instructor (of either level) D. Promotion to Associate Research Professor E. Promotion to (full) Research Professor</p>
<p align="center">Section 5 Mentoring and Professional Development of Professors at the Associate Level</p>	<p>Part Two: Section 2, 1. D. Promotion E. Mentoring and Professional Development of Professors at the Associate Level</p>

APPENDIX FIVE: Contents and Mapping of Chapter Five
FACULTY GRIEVANCE PROCEDURE
of Reorganized Faculty Handbook
from Current Faculty Handbook

FINAL LOCATION IN THE REORGANIZED HANDBOOK	LOCATION IN THE CURRENT HANDBOOK FROM WHERE REORGANIZED TEXT COMES
Section 1 Grounds	Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty - <i>Subsection IX: The Faculty Review Committee</i>
	Part One: Appendix B Operational Guidelines for the Faculty Review Committee
Section 2 Submission of Relevant Documentation and Dates for Filing a Grievance	Part One: Appendix B Operational Guidelines for the Faculty Review Committee
Section 3 Formation of and FRC Subcommittee and Recusals	Part One: Bylaw One Membership, Duties, and Responsibilities of Standing Committees of the Faculty - <i>Subsection IX: The Faculty Review Committee</i>
	Part One: Appendix B Operational Guidelines for the Faculty Review Committee
Section 4 Investigation of the Grievance and Access to Relevant Documentation	Part One: Appendix B Operational Guidelines for the Faculty Review Committee
Section 5 Resolution of the Grievance, Required Actions, and Final Appeals	Part One: Appendix B Operational Guidelines for the Faculty Review Committee

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Policy (B. Servatius, Chair)
Re: Motion to establish a new undergraduate BS degree program in Financial Technology (FinTech)

Motion: On behalf of the Business Department, the Undergraduate Policy and Curriculum Committee recommends, and I move, that the following new undergraduate program, BS Financial Technology, be added as described below.

Description of the Proposed Program:

The BS in Fintech is designed for undergraduate students interested in pursuing a career in the newly emerging FinTech industry, which includes traditional businesses that are transforming or expanding into alternative lending, cryptocurrency management, and trading, blockchain technologies, open banking, Insur-tech, Robo-advisement, machine learning, and data mining applications and cybersecurity. Academically, FinTech is both a technical and interdisciplinary field focusing on many areas, such as traditional finance, business analytics, quantitative modeling, financial analysis, MIS, business intelligence, mathematics, statistics, and computer science, among others. As a field of study, FinTech’s mission is to prepare and engage students in finance, analytic methods, and problem-solving skills reinforced through experiential learning opportunities and a relevant FinTech curriculum that includes course offerings competitive with regional peer and aspirant schools.

The program is covered by the accreditation of WBS by the Association to Advance Collegiate Schools of Business (AACSB-International. We will also seek to gain Certified Financial Analyst (CFA) recognition for the program. Our proposed courses are benchmarked to the CFA’s “Candidate Body of Knowledge,” which guides what is covered in each course <https://www.cfainstitute.org/en/programs/cfa/curriculum/cbok>. Students with an interest may later sit for the CFA certification exam to be certified CFA.

Proposed Distribution Requirements *for full details including university requirements, see page 5

Mathematics and Science (10/3 Units)

- **Mathematics** [2/3 Calculus, 2/3 Statistics] + add 1/3 for (MA 2071 Matrices and Linear Algebra I, or 2072 Accelerated Matrices and Linear Algebra I, or MA 2073 Matrices and Linear Algebra II)
- **Computer Science** (1/3 Units) [1/3 Computer Science – CS 1004-Intro to Programming for Non-majors]
- **Basic Science** (2/3 Units) [2/3 Science BB, CH, GE, PH]
- **Social Science** (2/3 Units) [2/3 Econ 1110 and Econ 1120]

Business Foundation Core Curriculum (4/3 Units)

1. BUS 2020 The Legal Environment of Business Decisions
2. ACC 2060 Financial Statements for Decision Making
3. FIN 2070 Risk Analysis for Decision Making
4. OBC 3354 Organizational Behavior and Change, or OBC 1010 Leadership Practice, or OBC 4367 Leadership, Ethics, and Social Responsibility.

(These courses already exist to support WBS’s other undergraduate degrees.)

FinTech Curriculum (3/3 Units)

The Fintech component of the curriculum is designed to provide foundational financial courses that will give students the financial preparation needed for the technical areas of the program. The Fintech core courses also introduce the student to technologies (FIN 3300) and analytical tools (FIN 3310) that firms in the financial services industry can use to disrupt the traditional delivery of financial services.

1. FIN 3300 Finance, Risk Analytics and Technology
2. FIN 3310 Financial Markets and Digital Currencies*
3. FIN 3330 Financial Analytics*

*Motion for new course sent to CAO

Technical Curriculum (3/3 Units)

The Technical component equips students with a working knowledge of Artificial Intelligence (AI – MIS 3730), Machine learning (ML – MIS 3787), Blockchain technologies (MIS 2300), and an understanding of how these technologies can revolutionize finance. Banks and firms can use AI and ML in the rapidly growing FinTech industry to predict customer behavior or habits via Apps that integrate various AI and ML techniques. These courses also discuss ethical uses of these technologies and tools so that students learn to use them appropriately. These tools allow the user to gain detailed insights into their customers.

1. MIS 2300 Business Applications of Blockchain*
2. MIS 3787 Business Applications of Machine Learning, or CS 4342 Machine Learning
3. MIS 3730 Artificial Intelligence with Business Applications*

*Motion for new course sent to CAO

Analytical Curriculum (3/3 Units)

The Analytical core introduces students to popular data analysis tools for decision-making. The Analytical component equips students with the applied statistical and modeling techniques needed to analyze and make predictions and inferences from complex real-world financial data. The empirical tools developed in the Analytical core - regression, classification/clustering; sampling methods (bootstrap and cross-validation); and decision tree learning will be vital skills needed for the respective concentrations.

1. BUS 2080 Data Analysis for Decision Making, or OIE 2081 Introduction to Prescriptive Analytics
2. MIS 4084 Business Intelligence
3. OIE 3510 Stochastic Models, or OIE 3460 Simulation modeling and Analysis, or OIE 4430 Advanced Prescriptive Analysis: From Data to Impact

(These courses already exist as part of WBS's focus on Business Analytics and on Industrial Engineering.)

Concentrations (6/3 Units)

Select one of the following three FinTech concentrations: (1) Financial Technologies, (2) Financial Analytics, (3) Financial Mathematics. Like the concentrations in our BS MGE program, each concentration includes business courses and relevant STEM courses. Each FinTech concentration includes two business courses and four technical courses, as follows:

1. Choose any 2/3 Units from: ETR 1100; OBC 1010 or OBC 4367; BUS 3010
2. Choose 4/3 Units from any of the following list of courses for each concentration. See page 6 for more details.

Note: If no concentration chosen, students will choose any 2 of the following: ETR 1100; OBC 1010 or OBC 4367; BUS 3010; then the student will choose the remaining 4 courses from at least two of the available concentrations. This will be indicated as General on the transcript.

**NEW BS FINANCIAL TECHNOLOGY (FINTECH)
OVERVIEW OF DEGREE REQUIREMENTS**

UNIVERSITY REQUIREMENTS (12/3 Units)	
HUMANITIES AND ARTS (6/3 Units): 6 courses including Inquiry Seminar/Practicum SOCIAL SCIENCE (2/3 Units): Satisfied by ECON 1110, ECON 1120 PHYSICAL EDUCATION (1/3 Units) INTERACTIVE QUALIFYING PROJECT (3/3 Unit)	
MATHEMATICS AND SCIENCE REQUIREMENTS (8/3 Units)	
BASIC SCIENCE (2/3 Units) Any Course with prefix: BB, CH, GE, PH MATHEMATICS (5/3 Units) Calculus - MA 1021; MA 1022; Statistics - MA 2611; MA 2612; Matrices and Linear Algebra - MA 2071 or MA 2072 or MA 2073 COMPUTER SCIENCE (1/3 Units): CS 1004 (recommended) or CS 1101 or CS 1102	
BUSINESS FOUNDATION CURRICULUM (4/3 Units)	
2 courses from financial competency and 2 from organizational, legal, and ethical competency	
<ol style="list-style-type: none"> 1. BUS 2020 The Legal Environment of Business Decisions 2. ACC 2060 Financial Statements for Decision Making 3. FIN 2070 Risk Analysis for Decision Making 4. OBC 3354 Organizational Behavior and Change, or OBC 1010 Leadership Practice, or OBC 4367 Leadership, Ethics, and Social Responsibility. 	
FINTECH FOUNDATION (3/3 Units)	
<ol style="list-style-type: none"> 1. FIN 3300 Finance, Risk Analytics and Technology 2. FIN 3310 Financial Markets and Digital Currencies 3. FIN 3330 Financial Analytics 	
TECHNICAL AND ANALYTICS COURSES (6/3 Units)	
Technical Courses (3/3 units) <ol style="list-style-type: none"> 1. MIS 2300 Business Applications of Blockchain 2. MIS 3787 Business Applications of Machine Learning, or CS 4342 Machine Learning 3. FIN 3730 Artificial Intelligence with Business Applications 	Analytics Courses (3/3 units) <ol style="list-style-type: none"> 1. BUS 2080 Data Analysis for Decision Making, or OIE 2081 Introduction to Prescriptive Analytics 2. OIE 3510 Stochastic Models, or OIE 3460 Simulation modeling and Analysis, or OIE 4430 Advanced Prescriptive Analysis: From Data to Impact 3. MIS 4084 Business Intelligence

FINTECH CONCENTRATION (6/3 Units) Choose any 2 from: ETR 1100; OBC 1010 or OBC 4367; BUS 3010 + Select 4 courses from a concentration below
<ul style="list-style-type: none"> • Financial Technologies • Financial Analytics • Financial Mathematics <p>Note: If no concentration is chosen, the student will choose the remaining 4 courses from at least two of the available concentrations. This will be indicated as General on the transcript.</p>
MAJOR QUALIFYING PROJECT (3/3 Unit) MQP must have a business focus related to FINTECH
FREE ELECTIVES (3/3 Unit)

FINTECH CONCENTRATIONS

FINTECH CONCENTRATION COURSES (6/3 Units) Note: If no concentration chosen, Students will choose any 2 of the following: ETR 1100; OBC 1010 or OBC 4367; BUS 3010; then the student will choose the remaining 4 courses from at least two of the available concentrations. This will be indicated as General on the transcript.		
Financial Technologies 1. Choose any 2 of the following: ETR 1100; OBC 1010 or OBC 4367; BUS 3010 2. Chose any 4 of the following: CS 2022/MA 2201 Discrete Mathematics CS 2119 or CS 2102 Object-Oriented Design Concepts CS 2223 Algorithms CS 3516 Computer Networks CS 4120 Analysis of Algorithms CS 4341 Intro to Artificial Intelligence CS 4404 Tools and techniques in Computer Network Security CS 4516 Advanced Computer Networks CS 4518 Mobile Computing CS 4801 Introduction to Cryptography and Communication Security	Financial Analytics 1. Choose any 2 of the following: ETR 1100; OBC 1010 or OBC 4367; BUS 3010 2. Chose any 4 of the following: DS 1010 Introduction to Data Science DS 2010 Modeling and Data Analysis OIE 2600 Scripting for Process and Productivity Improvement DS 3010 Computational Data Intelligence CS 3431 Database Systems I MIS 3720 Business Data Management OIE 4430 Advanced Prescriptive Analysis: From Data to Impact CS 4432 Database Systems II DS 4433 Big Data Management and Analytics CS 4445 Data Mining and Knowledge Discovery in Databases OIE 3510 Stochastic Models OIE 3460 Simulation modeling and Analysis	Financial Mathematics 1. Choose any 2 of the following: ETR 1100; OBC 1010 or OBC 4367; BUS 3010 2. Chose any 4 of the following: MA 2210 Mathematical Methods in Decision Making MA 2211 Theory of Interest I MA 2212 Theory of Interest II MA 2621 Probability for Applications MA 3231 Linear Programming MA 3233 Discrete Optimization MA 4235 Mathematical Optimization MA 4237 Probabilistic Methods in Operations Research MA 4635 Data Analytics and Statistical Learning MA 464X Introduction to time series analysis

Key Learning Objectives

Because FinTech is at the intersection of Business, Finance, and Information Technology, students will develop essential knowledge and skills in all three areas. Students will develop:

- Basic business acumen.
- Relevant programming skills.
- Knowledge of the fundamental principles of finance including accounting principles, time value of money, and capital markets.
- An understanding of the key technologies of the FinTech industry, including artificial intelligence (AI), machine learning (ML), blockchain & smart contracts, and cryptocurrency.
- An understanding of the information and communication tools, technologies, and standards integral to consumer, merchant, and enterprise services in the payments and financial service sectors.
- An ability to design solutions using these technologies for the emerging FinTech industry, for communities historically excluded from the banking and/or securities sectors, and for non-financial industries.
- Knowledge about the operational and strategic goals of financial institutions and intermediaries, how technology is reshaping not only the traditional areas of finance (e.g., legacy banking, securities business models, alternative lending ("alt- finance"), and wealth management), but also in related fields such as insurance ("insur-tech") and real estate, and why these changes are important.
- Knowledge about the emerging areas for entrepreneurial opportunities in the FinTech sector.
- An understanding of the limitations and challenges of FinTech, including equity, inclusion, ethical uses of technology, and the basic legal and regulatory frameworks of the U.S. banking and securities sectors.

Rationale:

The WPI Business School's FinTech degree directly responds to the growing need for technical FinTech talent beyond that of the traditional business school finance major as the financial service industries undergo a FinTech transformation. Consequently, the WBS's FinTech degree is designed to introduce key financial technology and its applications in financial services. Students will develop a broad and solid understanding of the recent innovations in FinTech and their benefits and limitations. The program will provide students with hands-on problem-solving experiences with partner Fintech Accelerator and Incubator labs. The program will encourage and support innovation and creativity by enabling students to develop entrepreneurial opportunities in FinTech and equip them with relevant knowledge and skills.

Background:

Financial Technology (FinTech) is a rapidly growing industry that uses technology to improve how firms in the financial services industry conduct business. FinTech disrupts the traditional delivery of financial services through the rapid integration of technology, algorithms, data, and mobile applications. FinTech is one of the fastest growing industries in the global economy, with over \$50 billion of investment in startup companies in 2018, the largest skills gap with 1.5 million positions created, and the highest salaries. FinTech has brought an unprecedented demand for professionals with advanced skills in finance, mathematics, programming, analytics, data science, applied statistics, and regulatory and compliance. A 2019 PwC survey found that 75% of financial services companies are creating jobs related to FinTech, and 42% of those companies are having trouble filling the positions.¹ Prospective FinTech careers range from

¹ [Global Fintech Report 2019 \(pwc.com\)](https://www.pwc.com/globaleconomy/2019-fintech-report)

performing artificial intelligence-enabled analytics for large companies to working on an electronic payment system for a small startup.

Massachusetts is a major FinTech hub, with more than 357 FinTech companies and 69 Incubators/Accelerators, making the region the 3rd largest FinTech innovation center in the United States. Massachusetts is home to large FinTech employers such as Fidelity Investments, Citizens, Mass Mutual, FinTech Sandbox, Vestigo Ventures, Putnam Investments, among several others, as well as a growing community of startups and innovators such as Flywire, Finomial, 55ip, SaaSWorks and Scientific Financial Systems, etc. In our state, the FinTech industry employs more than 30,000 people, with demand for skilled professionals growing rapidly. Despite FinTech's brisk acceleration (Goldman Sachs estimates that \$4.7 trillion of financial services revenue is at risk of displacement from FinTech), companies are having difficulty finding workers with the right combination of technical abilities and financial acumen. The proposed FinTech degree addresses this need in the marketplace.

The location of WPI in Worcester Massachusetts is ideal and advantageous for a Fintech program due its proximity to the Boston metropolitan and surrounding areas. Central and eastern Massachusetts is rich with FinTech related businesses providing unique and valuable opportunities to the program in terms of industry collaboration and partnerships, experimental learning opportunities, and career opportunities. Moreover, the Business School's distinctive history of delivering best in class programs at the intersection of business and STEM (e.g., IE, MGE, MIS) along with WPI's Engineering, Computer Science and Data Science programs which consistently ranked among the best in the nation makes the Business School an ideal setting for this innovative program. See endorsement of proposed WPI Fintech program by local fintech firms (see the Appendix to this motion).

Note: This BS Fintech proposal was developed with input and support from Computer Science, Data Science, and Mathematical Sciences.

The program will harness the WPI brand and reputation in STEM as it prepares graduates with the requisite skills to meet the FinTech sector's growing demand for quantitative modeling and analysis in finance. The opportunities provided by expected synergies from the Business School's outstanding MIS and Industrial Engineering programs, and WPI's upper-ranked computer science and mathematics resources, along with the proximity to Boston and surrounding areas, offer opportunities through a rich concentration of FinTech-related businesses. The FinTech Program will utilize these unique and valuable opportunities through industry collaboration and partnerships, experimental learning opportunities, and career opportunities with leading FinTech firms and organizations.

WPI's Business School expects an initial enrollment of 20-25 students in this degree program. One indication of the potential demand for this program by WPI students in the enrollment of 168 WPI students from across WPI in a FinTech career fair hosted by Mass FinTech and supported by the Business School in late September 2022. If only 15% of those students enrolled in our proposed B.S. FinTech program, we would meet our annual enrollment goal of 25 incoming B.S. Fintech students, expected after the first year or two. This includes double major opportunities with other majors across WPI. To put this projection in context, the WPI Business School programs graduated a total of 55 UG business students in 2021 (see Table 1). The BS in FinTech degree program has the potential to be a great addition to WBS's UG portfolio.

Table 1: WBS UG Majors

Major	Period				FinTech Major
	2018	2019	2020	2021	2023
MGT/BUS	5	4	3	2	
MGE	20	23	26	21	
MIS	8	4	10	5	
IE	27	36	30	27	
FinTech	n.a.	n.a.	n.a.	n.a.	20
All	60	66	69	55	

Note: Schools currently offering FinTech BS programs: Creighton University, Jacksonville University, New Jersey Institute of Technology, Seton Hall University, Virginia Commonwealth. These schools do not provide the STEM credibility that WPI has (except for NJIT).

Resource Needs: No new resources are required. We have already hired (1) a Professor of Practice in FinTech (a retired Fidelity executive) several years ago to run the FinTech Project Center (previously the Wall St. Project Center), (2) a tenured Associate Professor of Finance, Professor Kwamie Dunbar, starting Fall 2022 to design and implement FinTech programs in the Business School, (3) a teaching professor in Information Technologies starting Fall 2022 to teach blockchain and AI technologies and their business applications, and (4) a tenure-track Assistant Professor of Finance starting Fall 2023 to teach Finance and FinTech.

Impact on Distribution Requirements and Other Courses: Change in distribution requirements described in the motion.

Implementation Date: Academic year 2023-2024.

Contact: Prof. Adrienne Hall-Phillips, Undergraduate Program Coordinator, and Prof. Kwamie Dunbar, Program Director for the FinTech program

APPENDIX TO MOTION: LOCAL FINTECH SUPPORT FROM INDUSTRY

From: David Wolf

Company: Fidelity Investments

Industry: Finance

Title: Chief Product Officer, Finance Platform

LinkedIn profile: <https://www.linkedin.com/in/davidtwolf/>

Relationship with WPI: Have done Fintech MQPs, Independent Studies, Guest Speaking in Fintech/Finance/Business Courses & Clubs, and in sponsored Fintech Course Real World Industry Case Studies

“As Fidelity has transformed over time from a Financial Services company that utilizes Technology to do its business to a Technology Company that provides Financial Services has created the demand for resources that can speak and act in both Technical and Financial Services. languages simultaneously and fluently. This has become the key critical success factor which is becoming even more critical as we evolve on our journey to being 100% digital. The digital mindset drives innovation and adoption and having resources that can see both sides of the objective is what wins in this space.

Creating, full stack productive resources requires large investments of time, effort and preparation. Identifying the resources that can be successful is generally a bet that we have not been particularly successful at and need to improve our probability of success on. The ability to recruit from a proven school such as WPI, from a program that has already allowed resources to self-identify in this space and gone thru a formal program providing appropriate training in both with the internships and non-classroom learnings that WPI offers would dramatically alter our odds of success and reduce our need to invest in resources for long periods of time. The increase in productivity with less investment would help speed up our journey to whatever comes next.”

From: Jim O’Neil (WPI Alumni)

Company: SaaSWorks

Industry: Fintech Startup

Title: Co-Founder and CTO at SaaSWorks

LinkedIn profile: <https://www.linkedin.com/in/jim-oneill/>

Relationship with WPI: Have done Fintech MQPs and a WPI Alumni

“The financial services industry is going through a major modernization and transformation due to new innovations in the global monetary systems along with major disruptions with crowd-funding and new mechanisms for shared financial ownership. These new financial strategies are creating fractures in how financial services companies both manage money and service their customers and are demanding new talent and creative technical thinking in order to modernize the Financial Services industry. FinTech is the technology paradigm and emerging industry supporting these major changes however the talent pool is not large enough to support the current and future global demands. The time is now to create programs that educate more aspiring technology professionals to build the next financial platforms and bring more equality and transparency to the aging financial systems of the last decades.”

From: Mark Casady

Company: Vestigo Ventures

Industry: Venture Capital investing in Fintech Startups

Title: Vestigo Ventures Founder & General Partner

LinkedIn profile: <https://www.linkedin.com/in/mark-casady-5a662b8/>

From: Ian Sheridan

Company: Vestigo Ventures

Industry: Venture Capital investing in Fintech Startups

Title: Co-Founder & Managing Director

LinkedIn profile: <https://www.linkedin.com/in/iansheridan1/>

From: David Blundin

Company: Vestigo Ventures/Cogo Labs

Industry: Venture Capital investing in Fintech Startups

Title: Co-Founder & General Partner

LinkedIn profile: <https://www.linkedin.com/in/david-blundin/>

Relationship with WPI: Have done Fintech MQPs, Independent Studies, and Guest Speaking in Fintech/Finance Courses & Clubs.

“Fintech has grown exponentially over the past six years that we have established Vestigo Ventures as an early stage FinTech venture capital investor. In our early years the question is what is FinTech? Now it’s FinTech-I need exposure to this important segment of the economy. This has driven a significant increase in an allocation of capital to venture funds.

The other area of growth besides the entrepreneurial community is in incumbents. We have witnessed the incumbents adding innovation and FinTech insights to their set of corporate priorities. This is from the bank or insurance company or asset manager and evidenced by participant in Mass Challenge among others.

There is demand for graduates of WPI to have this background as part of the need to create resources in all parts of this ecosystem. This talent is difficult to find ready made coming out of a university.

WPI combines the classroom learning with the practical experience I know we value. We hear of that same demand at established financial services organizations. The university is in an amazing cross roads of this demand in startups as well.

Finally our experience of the quality of the WPI students in undergraduate through doctoral programs informs our view. They have been instrumental in helping us support the growth of FinTech. Imagine the force multiplier of a major in FinTech to gain the attention and growth of student interest in this growing segment of economy. “

From: Mohammed Dastigir

Company: MassMutual

Industry: Insurance

Title: Head of FinTech & HealthTech Partnerships, Ecosystem Development

LinkedIn profile: <https://www.linkedin.com/in/mohammed-dastigir-30bb6a63/>

Relationship with WPI: Partners on Mass Fintech Hub that WPI is also a member of.

“Financial services and technology are closely intertwined in today’s digital world. This merger – the Fintech industry – has tremendous impact on the daily lives of consumers and many business professionals. Creating innovative products and services that act as solutions for both helps support our economy and keep us globally competitive.

As a Computer Systems Engineer and Entrepreneur who did not have the benefit of learning about Fintech in college, I believe offering an accredited Fintech degree is critical for all Academic institutions – providing earlier access to related education will help pave the way for the next generation in this quickly growing field.”

From: Sarah Biller

Company: FinTech Sandbox

Industry: Fintech

Title: Executive Director - Vantage Ventures | CoFounder FinTech Sandbox & CMX | Start-up Board Member & Advisor | Investor

LinkedIn profile: <https://www.linkedin.com/in/sarahbiller/>

Relationship with WPI: WPI and Sarah Partner closely on Mass Fintech Hub, Fintech Sandbox, and Boston Fintech Week.

“The opportunity presented today through the application of emerging technologies to solve for longstanding challenges confronting the financial services such as personalized portfolio construction that consider sustainability, real-time payments to minimize persistent poverty or new forms of digital identity to drive inclusivity is unprecedented in our industry. These are only a few of the many compelling challenges drawing extraordinary students back to the financial services industry and, specifically, their desire to utilize FinTech to make an impact on the world. WPI's interest in developing a rigorous, degree-conferring curriculum around the intersection of financial services and technology to channel these interests with the same vigor that WPI guides its students to merge theory and practice to address real-world global problems is indicative of a bright future for Financial Services.

WPI is uniquely positioned to help its students understand how the Financial Services sector has been impacted by the application of technology over time. The Institution's leadership in other areas such as robotics as demonstrated its commitment to leveraging the increasing availability of computational power and big data to usher in a new era of innovation in other industries is an important platform to launch a FinTech program. It has also recruited exceptional industry practitioners to pave the way for WPI to be a leader in diverse areas of FinTech such as payments, digital ledgers, foreign exchange, lending, insurance, investment advice (i.e., RoboAdvisors), and wealth management among other areas.

The combination of these two decisions are arguably key ingredients to launching a nation-leading FinTech program and the opportunity it presents to provide students a practical approach to critically thinking about these changes. I see WPI's approach to teaching students to understand the application of technology and the economic value of these changes to the financial services industry as well as the agents catalyzing these changes as a remarkable confluence at just the right time.”

From: Pete Reiser

Company: Citizens Bank

Industry: Banking

Title: Head of Digital Product Development & FinTech Partnerships

LinkedIn profile: <https://www.linkedin.com/in/petereiser/>

Relationship with WPI: WPI and Pete partner closely on Mass Fintech Hub events. WPI also does Fintech MQP projects with Citizens Bank.

“In financial services, the ability to effectively utilize the concept of Open Banking will be what separates winners from losers moving forward. Consumers are simply demanding it. Entrenched firms are quickly turning to partnerships with FinTechs as a way to remain relevant to consumers and competitive with new entrants that are typically able to move much more quickly. WPI is uniquely positioned to take advantage of this growing need based on its approach to cross-domain curriculum, as well as the existing partnerships it has in the New England region with a broad range of small and large financial service firms.”

State of the Art Financial Technology Lab.

The mission of the center is to extend the educational goals of the Business School through innovative classroom pedagogy, cutting-edge FinTech research, and real-world applications. The mission is translated into three broad strategies:

- To integrate the Business School's Financial Technology Lab into the undergraduate curricula to enhance student learning, professional development, and success.
- To create a positive, collegial, and collaborative environment that is supportive of faculty and student research activities.
- Strengthen external relations within the FinTech community – Mass FinTech Hub and WorcLab.
- The FinTech Lab provides world-class education, supporting undergraduate courses and providing faculty, students, and staff to an unrivaled collection of financial technologies.

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Policy (Prof. Servatius, Chair)
Re: Motion to allow changes to submitted student projects for protecting privacy and confidentiality

Motion: The Committee on Academic Policy recommends and I move that the “WPI Electronic Project Submission Policy” be *modified*, and that the “WPI Personal Privacy and Confidentiality Change Policy with Respect to Electronic Project Submissions” be *added* to allow changes related to privacy and confidentiality without any time constraints, and to update the WPI undergraduate catalog to reflect these changes, as described below.

Description of the Proposed Changes:

- The motion would *modify* the current **Electronic Project Submission Policy** (page 18, WPI 2022-23 Undergraduate Catalog) as follows (with ~~striketrough~~ text deleted and **red bold** text added):

Electronic Project Submission Policy

WPI requires that all undergraduate students submit their Interactive Qualifying Project (IQP) and Major Qualifying Project (MQP) electronically (<https://eprojects.wpi.edu/>).

Students must be registered for a minimum of 1/6 unit of qualifying project credit in the term in which the final project report is submitted.

No matter which format is used to create the original report document (Microsoft Word, LaTeX or other), the final report must be converted to a PDF format in order to be submitted as an eProject. The final PDF is required, and additional related files such as simulations, computer programs, multimedia, and data sets may be submitted as a component of the project. Guidance on eProject report formatting and file formats for the final report and any supplementary files is provided within the online submission process.

The final project report should be carefully proofread. Once the submitted project has been approved by the advisor and released to WPI’s digital repository (~~Digital WPI~~) by the Registrar’s Office, it is considered an academic record and cannot be ~~edited~~ **changed, with the exception of changes per the WPI Personal Privacy and Confidentiality Change Policy with Respect to Electronic Project Submissions.**

The deadline for the submission of the initial report draft and the final document may be established at the discretion of the project advisor. Drafts and reports need not be accepted by the advisor after the established deadline.

A project that is completed by a team of students, except in extenuating circumstances, will submit ONE project report from the group. After the MQP or IQP team submits the final version of the project report, the advisor must review the work and approve or reject it online at <https://eprojects.wpi.edu/>.

- The motion would *add* the following **WPI Personal Privacy and Confidentiality Change Policy with Respect to Electronic Project Submissions** (to follow immediately after the Electronic Project Submission Policy in the WPI Undergraduate Catalog):

WPI Personal Privacy and Confidentiality Change Policy with Respect to Electronic Project Submissions

It is WPI’s goal to protect the personal privacy and confidentiality of its student authors and members of the extended WPI community, including sponsors, interviewees, and collaborators. To fulfill this goal, WPI will make reasonable and timely efforts to address personal privacy and confidentiality needs that require changes to published undergraduate student works at DigitalWPI. When brought to

WPI's attention by authors or others with an interest in protecting privacy and confidentiality, these requests will receive confidential review for approval, to protect authors' or others' privacy and confidentiality interests. Where possible WPI will partner with authors and advisors to replace or redact original submissions. Original submissions will be retained in the library's non-public administrative archive and file replacements will be documented in confidential library administrative records.

Rationale:

Current faculty policies state that submitted student works cannot be revised after publication:

The final project report should be carefully proofread. Once the submitted project has been approved by the advisor and released to WPI's digital repository (Digital WPI) by the Registrar's Office, it is considered an academic record and cannot be edited.

The only exception is introduced with a faculty-approved joint motion of CAO, CGSR, and CAP to amend the policy on electronic filing of IQPs, MQPs and graduate materials "to enable the temporary withholding of the Materials from the public (up to 180 days), pending review by the sponsor and redaction of certain report content, as identified by the sponsor..."

While there is no documented faculty policy on post-submission changes to the text of graduate works, in practice WPI follows the policy for undergraduate works, with the Dean of Graduate Studies currently serving as the approving administrator (this position did not exist in 2007).

The current policy doesn't reflect current and peer practices that permit limited changes after publication. Among peers who do permit limited changes are California Institute of Technology, Cornell University, MIT, and Purdue University.

Although permitted changes are few, it should be noted that most of the policies address graduate works. WPI is unique in requiring multiple undergraduate submissions to a public repository, and therefore has a unique responsibility to protect the privacy of students whose work at most institutions would not be available for public review.

The rare but occasional occurrence of 'off the books' requests for reasonable changes to protect personal privacy or confidentiality suggests that WPI could adopt a more nuanced policy for correcting, editing, or replacing student works. These requests include requests to redact personally identifying information or to replace a previously used name with a preferred or "lived" name.

While making changes to names (or other personally identifying information) in the body of a submitted work may seem unusual, academic publishers and institutional repositories have responded to advocacy by organizations such as COPE with clear, supportive policies that respect both academic integrity and personal privacy. Several examples include arXiv, Elsevier, Dartmouth repository.

Together with the Registrar and the Dean of Student Affairs, the Gordon Library recommends that faculty should review and revise the current policy to allow limited changes in submitted works to be made at the request of authors at any time (during or after their time at WPI), including replacement in the public archive of originally submitted student works to remove a previously used or "dead" name and replace it with a preferred or "lived" name.

Proposed Implementation:

The Library has proposed the following procedures to implement the privacy and confidentiality changes described above:

Author requests:

1. **Document replacement by author (preferred):** WPI student authors, including both current students and former students/alums may request the redaction or replacement of personal information including the author's name.

Student authors may provide a replacement document together with a list of all changes they have made in the document. The library will review the list of changes and provide the replacement and original documents to the Dean of Undergraduate Studies or their designee, for their approval.

If approved, the library will replace the published document with the replacement document provided by the student. The library will document in a non-public administrative location the date of the document replacement, the requestor and the approval received.

2. **Document replacement by WPI:** In exceptional cases where the author is unable to provide an updated document, they may provide the library with clear instructions, ideally in a marked-up copy of the document, identifying all the changes requested. The library will use currently available software to make edits where possible, and submit the revision together with the original file and a list of changes made, to the Dean of Undergraduate Studies or their designee, for their approval.

If approved, the library will replace the published document with the replacement document provided by the student. The library will document in a non-public administrative location the date of the document replacement, the requestor and the approval received.

Limitations: The library may not be able to make all requested changes. For example, the library will not make or request changes to other documents in the repository that cite a work using the previous name(s). The library is not currently able to support name changes in references and citations of works. Also, the library cannot make changes to other services, including third party search and discovery tools that may display authors for works in Digital WPI.

3. **Requests by other persons:** Any person, whether affiliated or not affiliated with WPI, who is personally mentioned in any student work, may request a revision of that work to meet their personal or privacy needs.
 - The library will provide a procedure explaining how to request such changes for documents in the repository.
 - Like errata, these requests will require a brief explanation of the reason for requesting the change, and approval by the Dean of Undergraduate Studies or their designee.
 - The author(s) will be notified if possible that WPI will make the approved change(s) and replace the published document.
 - The library will use currently available software to make edits where possible, and submit the revision to the advisor or department or program chair for their approval before making the replacement.
 - The library will confirm with the office or person requesting the change that the change has been made.
 - The library will document in a non-public administrative location the change request, the date of the change and the nature of the change (e.g. removal of personally identifying information).

The library will publish the information at a public facing website to provide a clear path for requesting changes in metadata submitted to Digital WPI.

Appendix
Consent Agenda Motions

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add FIN 3310 Financial Markets and Digital Currencies

Motion: On behalf of the Business School, the Committee on Academic Operations recommends and I move that the course FIN 3310 Financial Markets and Digital Currencies, as described below, be added.

Proposed Course Description:

FIN 3310 Financial Markets and Digital Currencies (Cat. I)

This course introduces students to the financial innovations and digital assets that are significantly transforming the banking and financial services sector. The course exposes students to strategic skills and analytical tools that prepare them to thrive in this digital age. The immersive experience will also include an understanding of the changing dynamics in the global banking and financial services sectors and how leveraging fintech and analytics can drive innovation and digital transformation. The course will also explore how digital currency innovations are increasingly altering basic financial intermediation functions such as payment processing, risk management, information dissemination, price discovery, capital raising, consumer expectations concerning access to funds, and the timing of loan decisions. Students will also spend time exploring the emerging challenges presented by the FinTech revolution, including traditional and emergent competitors as well as demographic, social, ethical, and technological forces facing the industry. Students will have hands-on problem-solving experiences that can be useful in FinTech applications and innovation. Students will demonstrate their knowledge through exercises, exams, and a final project that explores the raising of financing through the decentralized finance ecosystem.

Recommended background: Knowledge of Finance fundamentals (equivalent to that in FIN 2070). Basic knowledge of the financial industry would also be helpful (e.g., FIN 3300).

Rationale:

Financial Technology (FinTech) is a rapidly growing industry that uses technology to improve how firms in the financial services industry conduct business. FinTech disrupts the traditional delivery of financial services through the rapid integration of technology, algorithms, data, and mobile applications. This has brought an unprecedented demand for professionals with advanced skills in finance, mathematics, programming, analytics, data science, applied statistics, and regulatory and compliance. This new course will address these growing market realities and will prepare students with hands-on problem-solving experiences. The courses will be appealing to students who are interested in pursuing a career in the newly emerging FinTech industry or a career with traditional businesses that are transforming or expanding into alternative lending, cryptocurrency management, and trading, blockchain technologies, open banking, Insur-tech, Robo-advisement, machine learning, and data mining applications and cybersecurity. Some may work for traditional financial services companies, which need staff with technical skillsets to improve existing business practices and/or develop new processes related to technological innovations. The benefit of adding this course is that MGE, MIS, BU, and IE students will now have an additional technical elective option. This course will also be options to complete the FinTech minor.

Resource Needs:

Instructor: Kwamie Dunbar, instructor-of-record is available

Classroom: Standard classroom

Laboratory: none

Library resources: No additional needs for library resources

Information Technology: No special support or equipment is needed from the ATC.

Assessment: Each course will be assessed through student course feedback (i.e., outcomes 1, 2, 7, and 19) and reflections from students during course delivery.

Implementation Date: AY 2023-2024

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add MIS 3730 Artificial Intelligence with Business Application

Motion: On behalf of the Business School, the Committee on Academic Operations recommends and I move that the course MIS 3730 Artificial Intelligence with Business Application, as described below, be added.

Proposed Course Description:

MIS 3730 Artificial Intelligence with Business Application (Cat. I)

This course studies the problem of making computers act in ways which we call "intelligent". Topics include major theories, tools and applications of artificial intelligence, aspects of knowledge representation, searching and planning, and natural language understanding. Students will be expected to complete projects which express problems that require search in state spaces, and to propose appropriate methods for solving the problems.

Rationale:

Financial Technology (FinTech) is a rapidly growing industry that uses technology to improve how firms in the financial services industry conduct business. FinTech disrupts the traditional delivery of financial services through the rapid integration of technology, algorithms, data, and mobile applications. This has brought an unprecedented demand for professionals with advanced skills in finance, mathematics, programming, analytics, data science, applied statistics, and regulatory and compliance. This new course will address these growing market realities and will prepare students with hands-on problem-solving experiences. The courses will be appealing to students who are interested in pursuing a career in the newly emerging FinTech industry or a career with traditional businesses that are transforming or expanding into alternative lending, cryptocurrency management, and trading, blockchain technologies, open banking, Insur-tech, Robo-advisement, machine learning, and data mining applications and cybersecurity. Some may work for traditional financial services companies, which need staff with technical skillsets to improve existing business practices and/or develop new processes related to technological innovations. The benefit of adding this course is that MGE, MIS, BU, and IE students will now have an additional technical elective option. This course will also be options to complete the FinTech minor.

Resource Needs:

Instructor: Daniel Treku, instructor-of-record is available

Classroom: Standard classroom

Laboratory: none

Library resources: No additional needs for library resources

Information Technology: No special support or equipment is needed from the ATC.

Assessment: Each course will be assessed through student course feedback (i.e., outcomes 1, 2, 7, and 19) and reflections from students during course delivery.

Implementation Date: AY 2024-2025

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the course number and description of IMGD/WR 2400: Writing Characters for Interactive Media and Games

Motion: On behalf of the IMGD Program and the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that the course number of IMGD/WR: 2400 Writing Characters for Interactive Media and Games be modified to IMGD/WR 3450, and that the course description be modified as described below.

Description of the Proposed Modifications:

Current course number and description:

IMGD/WR 2400 - Writing Characters for Interactive Media and Games

Course description: This course will present concepts and skills necessary to create compelling characters in interactive media and games. Topics covered may include the 3 dimensions of character, growth and development of the player-character and non-player characters, dialogue, character relationships and evoking emotions through rhetorical tropes. Recommended background: Previous experience in the fundamentals of writing for interactive media and games, such as that provided by IMGD 1002: Storytelling for Interactive Media and Games. Students may not receive credit for both IMGD/WR 2400 and IMGD 240X.

Proposed course number and description:

IMGD/WR 3450 - Writing Characters for Interactive Media & Games

Course description: This writing-intensive course reinforces narrative skills to achieve proficiency in character creation and dialogue for interactive media, including a survey of character writing techniques across different media and an examination of what changes when interactivity is added. Coursework will involve major forms of game writing, suitable for inclusion in a portfolio. Topics covered may include character exposition, development of rich playable and non-playable characters, short voice-over audio, interactive dialogue and interactive character arcs, and game character design. Recommended background: previous experience with story structure and writing for interactive media, such as that provided by IMGD/WR 2450 (formerly numbered IMGD/WR 3400). Students may not receive credit for both IMGD/WR 3450 and IMGD/WR 2400.

Other needed catalog changes: In addition to the revised course description, everywhere in the catalog that IMGD/WR 2400 appears would be replaced with IMGD/WR 3450. This includes a mention in the list of example courses for the Creative Writing minor (p. 197 of the 2023-24 undergraduate catalog).

Rationale:

With recent changes in IMGD faculty, the curriculum for this course has evolved to present a higher workload, requiring more time management skills, creating an opportunity for serious writing and narrative design students to learn industry practices and build a strong writing portfolio. The new numbering swaps it with its counterpart (the former IMGD 3400), while giving it a unique identity to prevent confusion.

Implementation Date: AY 2023-2024

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the course number, title, and description of IMGD/WR 3400: Writing Narrative for Interactive Media and Games

Motion: On behalf of the IMGD Program and the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that the course Writing Narrative for Interactive Media & Games, which is cross-listed for both an IMGD and WR, be re-numbered as a 2000-level course with a revised course description.

Description of the Proposed Modifications:

Current course number, title, and description:

IMGD/WR 3400: Writing Narrative for Interactive Media and Games

Course description: This writing-intensive course covers concepts and skills necessary to write and implement narrative in interactive media and games. Topics include themes and style, different types of games and platforms, systemic storytelling, linear vs. non-linear narratives, editing, writing with purpose and audience in mind, and collaboration with other members of a development team. Recommended background: Previous experience in writing for interactive media and games, such as that provided by IMGD/WR 2400: Writing Characters for Interactive Media & Games. Students may not receive credit for both IMGD/WR 3400 and IMGD 340X.

Proposed course number, title, and description:

IMGD/WR 2450: Narrative Design for Interactive Media and Games

Course description: This course will introduce key narrative concepts and skills necessary to craft linear and branching experiences in games and interactive media. These lessons can be of fundamental value to all interactive media and any development role. Topics covered may include world-building, writing within intellectual property, lore creation, environmental storytelling, and quest design. Students will work in small groups throughout the course to provide feedback and practice reciprocal creative roles in narrative creation.

Recommended background: design and development fundamentals.

Students may not receive credit for both 2450 and IMGD/WR 3400.

Other needed catalog changes: In addition to the revised course description, everywhere in the catalog that IMGD/WR 3400 appears would be replaced with IMGD/WR 2450. This includes a mention in the IMGD focus pair for writing (p. 212 of the 2023-24 undergraduate catalog).

Rationale:

With recent changes in IMGD faculty, the curriculum for this course reduces its prior workload, making it more of an introductory writing and world-building course with broader appeal anyone studying writing, design, or other creative disciplines. The new numbering swaps it with its counterpart (2400), while giving it a unique identity to prevent confusion.

Implementation Date: AY 2023-2024

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the course title of BME 3014 Signal Processing Laboratory

Motion: On behalf of the Biomedical Engineering Department, the Committee on Academic Operation recommends, and I move that the course title of BME 3014 Signal Processing Laboratory” be modified to BME 3014 Physiological Signals Laboratory I: Techniques.

Description of the Proposed Modifications:

Current course title:

Title: BME 3014 Signal Processing Laboratory

Description of the Proposed Modifications:

Current course title:

Title: BME 3014 Physiological Signals Laboratory I: Techniques

Rationale:

This course remains identical to BME3014 Signal Processing Laboratory but will have a new name in order to be consistent with the companion new course proposed, “BME 301X - Physiological Signals Laboratory II: Applications”. This will provide for clarity for our students in identifying the best BME labs to take for their experience level and interest areas.

Implementation Date: 2023-24 academic year

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the course title of BME 3605: Biotransport Laboratory

Motion: On behalf of the Biomedical Engineering Department, the Committee on Academic Operation recommends, and I move that the course title of BME 3605 Biotransport Laboratory be modified to BME 3605 Biotransport Laboratory II: Applications.

Description of the Proposed Modifications:

Current course title:

Title: BME 3605 Biotransport Laboratory

Proposed course title:

Title: BME 3605 Biotransport Laboratory II: Applications

Rationale:

This course remains identical to BME 3605 Biotransport Laboratory but will have a new name in order to be consistent with the companion new course proposed, “BME 360X Biotransport Laboratory I: Techniques”. This will provide for clarity for our students in identifying the best BME labs to take for their experience level and interest areas.

Implementation Date: 2023-24 academic year

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the title and description of GN 2511: Intermediate German I

Motion: On behalf of the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that the course title and description of GN 2511: Intermediate German I be modified as described below.

Description of the Proposed Modifications:

Current course title and description:

GN 2511: Intermediate German I (Cat. I)

A continuation of Elementary German II, with increased emphasis on oral and written expression. Basic textbook is supplemented by a collection of simple literary texts by the Grimm brothers, Brecht, and Bichsel.

Recommended background: Elementary German II

Proposed title and description:

GN 2511: Intermediate German I: Cultural Practices and Products of the German-Speaking World (Cat. I)
Builds on the foundation of Elementary German by moving from the level of immediate everyday contexts towards broader cultural phenomena. Students investigate cultural practices, attitudes and products related to a variety of topics such as health and hygiene, environmental protection, travel and transportation, childhood, work, and education. Work with language supports interpretations of short texts (written, viewed, and heard), small-group interactions that navigate real-life situations, and presentations on key cultural products of the German-speaking world.

Recommended background: GN 1512

Rationale:

We wish to provide more descriptive accounts of our courses, especially for students who might be unsure what to expect at various stages of the sequence of German courses. The use of current terminology from the field of second-language acquisition likewise renders the course content more legible for external audiences.

The new title and description do not describe a new course; instead, they offer a fuller and more accurate description of what students should expect in the existing course, using the current terminology from the field of second-language acquisition.

Impacts on students: Prospective students of German will have a clearer idea of what to expect in the course and which proficiencies they will have attained by the end of the course. No impact on distribution requirements, other courses, etc.

Resource Needs: No new resources necessary.

Implementation Date: 2023-24 Academic year.

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the title and description of GN 3511: Advanced German I

Motion: On behalf of the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that the course title and description of GN 3511: Advanced German I be modified as described below.

Description of the Proposed Modifications:

Current course title and description:

GN 3511 Advanced German I (Cat I)

Reading and in-class discussion of a wide variety of contemporary nonfictional and fictional texts. Some video viewing. Weekly brief writing assignments and continued expansion of vocabulary. Weekly vocabulary quiz. Review of grammar and introduction to advanced stylistic problems.

Recommended background: Intermediate German II

Proposed title and description:

GN 3511: Advanced German I: Exploration and Innovation in the German-Speaking World (Cat I)

The first course in the second-year sequence explores innovation in social, political, and scientific contexts in the German-speaking world. Students interpret increasingly sophisticated media (news segments, interviews, short literary texts, historic documents, songs, etc.), realize complex communicative tasks in meaningful contexts, and present on various cultural products and historical events. At the end of this course students will be able to use written and spoken German to narrate complex events in multiple time frames. Special emphasis on the development of written communication skills.

Recommended background: GN 2512

Rationale:

We wish to provide more descriptive accounts of our courses, especially for students who might be unsure what to expect at various stages of the sequence of German courses. The use of current terminology from the field of second-language acquisition likewise renders the course content more legible for external audiences.

The new title and description do not describe a new course; instead, they offer a fuller and more accurate description of what students should expect in the existing course, using the current terminology from the field of second-language acquisition.

Impacts on students: Prospective students of German will have a clearer idea of what to expect in the course and which proficiencies they will have attained by the end of the course. No impact on distribution requirements, other courses, etc.

Resource Needs: No new resources necessary.

Implementation Date: 2023-24 Academic year.

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to modify the title and description of GN 3512: Advanced German II

Motion: On behalf of the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that the course title and description of GN 3512: Advanced German II be modified as described below.

Description of the Proposed Modifications:

Current course title and description:

GN 3511: Advanced German II (Cat. I)
A continuation of Advanced German I.
Recommended background: GN 3511
This course satisfies the Inquiry Practicum requirement.

Proposed title and description:

GN 3512: Advanced German II: National Identities and Stories (Cat. I)
How are national identities communicated, contested, and settled? This course foregrounds the diversity of German culture as disseminated through various media. Students will interpret and present on longer texts (e.g. film, music, literature), and discuss these in the form of complex written and oral discourse. At the end of the course students will be able to communicate in German about topics and issues (e.g. history, citizenship, migration) central to cultural discourse in the German-speaking world. Special emphasis on the development of written communication. This course satisfies the Inquiry Practicum Requirement.
Recommended background: GN 3511

Rationale:

We wish to provide more descriptive accounts of our courses, especially for students who might be unsure what to expect at various stages of the sequence of German courses. The use of current terminology from the field of second-language acquisition likewise renders the course content more legible for external audiences.

The new title and description do not describe a new course; instead, they offer a fuller and more accurate description of what students should expect in the existing course, using the current terminology from the field of second-language acquisition.

Impacts on students: Prospective students of German will have a clearer idea of what to expect in the course and which proficiencies they will have attained by the end of the course. No impact on distribution requirements, other courses, etc.

Resource Needs: No new resources necessary.

Implementation Date: 2023-24 Academic year.

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add HI 1333: Introduction to American Histories of Protest and Power

Motion: On behalf of the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that HI 1333: Introduction to American Histories of Protest and Power, as described below, be added.

Proposed Course Description:

HI 1333: Introduction to American Histories of Protest and Power (*Cat I*)

Why do people organize and protest to change the world around them? This course takes a topical approach to introduce the historical questions, intersectional methods, and contemporary sources that shape the study of social movements on the political left and right. Balancing the exploration of the ideological, political, and economic roots of protest movements and the identities, strategies, and technologies that inspire individual and collective action, this course examines the varied responses that protest movements elicit from society and the structures of power from suppression to realization to cooptation. Although protests movements, such as abolitionist, populist, white supremacist, Civil Rights, Black Power, feminist, gay liberation, anti-war, environmental, socialist, labor, and/or alt-Right movements, under consideration in this course will change, students can only receive credit for it once.

Recommended background: None.

Anticipated Instructors: Professors Lindsay Davis and Joseph Cullon

Rationale:

This new course number, title, and description replace the old HI 1312: Introduction to American Social History. HI 1312's description was overly brief and did not accurately convey what students would encounter in the course. The new title and description better reflect the content and focus of the course as it has evolved in the last decade to take a social historical approach to the study of social movements. In addition, the description makes clear that the course takes a topical approach focusing on particular protest movements to cultivate not only breadth of coverage but also depth of analysis and comparative approaches. Further, at a time when alternative teaching or administrative assignments frequently draw history faculty from their established courses, this revision would allow stand-in instructors greater flexibility in establishing the thematic emphasis of their sections. Thus, the revision also would allow the instructor autonomy to connect their other teaching initiatives and research enterprise.

Resource Needs: No new resources are required. The department already has full-time faculty appropriate for this course. Classroom needs are typical for HUA courses. No special information technology is required. Library resources are adequate to offer this course. The expected enrollment is 25, and the course type is Lecture/Discussion.

Intended audience and Impact on Distribution Requirements and other Courses: The course is designed to appeal to students seeking to take a depth or breadth course toward the HUA Requirement as well as to inspire student to pursue further HUA course work relating recent HUA initiatives in Africana Studies, Gender, Sexuality, and Women's Studies, Environmental Humanities, and other self-designed thematic fields relating to social justice and the imperatives of diversity, equity, and inclusion.

Impact on Distribution Requirements and Other Courses: This introductory course will continue to provide options for students completing the Humanities and Arts Requirement as well as several major and minor programs.

Implementation Date: Academic Year 2022-2024.

Contact: Joseph Cullon, Associate Head for the Humanities, Department of Humanities and Arts, jcullon@wpi.edu

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add HU 1400: Introduction to Africana Studies

Motion: On behalf of the Humanities and Arts Department, the Committee on Academic Operation recommends, and I move that HU 1400: Introduction to Africana Studies, as described below, be added.

Proposed Course Description:

HU 1400: Introduction to Africana Studies

This survey course introduces students to the content and contours of Africana Studies as a discipline and highlights its genealogy, development, and future challenges. The course focuses on the black experience in its historical and current unfolding in the Americas, particularly the United States, the Caribbean, Canada, and Latin America. It also gives attention to how members of the Diaspora have engaged with Africa, and to how Africans have responded to the history of enslavement, colonialism, racism, and globalization. In this course, scholarly literature, film, music, photography, and artwork will be used to develop a critical understanding of the experience of Afro-descended peoples around the world.

Recommended background: None.

Anticipated Instructors: Professor Jeanne Essame, Professor Trent Masiki

Rational:

For many years, HUA only offered only a single Cat. II introductory course (EN 1257) specifically addressing the African American experience as a piece of a broader African diaspora. This started to change in AY 2021-2022, when a historian of the Black experience in the Americas joined the HUA faculty. Now with the addition of another faculty member studying African American literature in AY 2022-2023 and the current search for a professor of music with a specialty in the music of the African diaspora, the Department is poised to offer a coherent block of introductory, intermediate, and advanced seminar courses in Africana Studies across HUA disciplines (AR, EN, HI, MU, and WR) for students to fulfill the HUA Requirement with a depth field in Africana Studies. These courses can also connect with other university offerings, especially in Social Science and Policy Studies (SSPS), to form the core of an emerging minor program in Africana Studies.

This new course is part of an interdisciplinary initiative to strengthen WPI's curricular and co-curricular resources devoted to Africana Studies through recent faculty hires in HUA and SSPS. It is designed for students with a general interest in Africa and its diaspora including those completing the Humanities and Arts requirement, those seeking to pursue a minor or major in International and Global Studies, those with plans to go to WPI project centers in the region, and those who return from project centers and want to enrich and extend their engagement with Africana Studies. It also adds an introductory course in Africana Studies to complement the existing course INTL 2510: Modern Africa. Additionally, this course serves as an introduction to approaches in transregional studies and other forms of scholarly inquiry that are not confined to particular nations or world regions. In placing emphasis on African diasporic communities in the Americas and the Caribbean as well as in Africa itself, this course will engage students with perspectives from postcolonial, transnational, mobility, gender/sexuality, and race/ethnicity studies. Finally, it will bridge existing courses in Latin American and Caribbean Studies and United States History with the emerging initiative in Africana Studies.

The intended audience for this course includes:

- Students wishing to engage with the history, literature, music, and culture of the Africana diaspora
- Students seeking to complete the HUA Requirement with a thematic depth field in Africana Studies
- Students seeing to complete a minor in Africana Studies

This course and the Africana Studies initiative of which it is a piece support WPI's values of respect, community, and inclusion and moves WPI forward toward meeting the goals of "Lead With Purpose: WPI's Strategic Plan, 2021-2026." By creating spaces in our curriculum that critically engage various methods and approaches in Africana Studies, we will allow Black, Indigenous, and People of Color (BIPOC) students to see their cultures and experiences substantively and clearly reflected in course titles and descriptions, perhaps "enhanc[ing] the outcome and experience of minoritized and underrepresented student populations at WPI." Creating academic spaces that can cross over with co-curricular activities of BIPOC students and Office of Diversity, Inclusion, and Multicultural Education will also allow us to not recruit but to meaningfully support "faculty and staff that increase the diversity of WPI and evolve structures and systems to ensure an inclusive campus community."

Resources Needs: No new resources are required. The enrollment cap will be 35 and the course type is Lecture/Discussion.

Impact on Distribution Requirements and Other Courses: This course will provide additional options for students completing the Humanities and Arts Requirement and the Humanities and Arts Major and will constitute a core course for a new Minor in Africana Studies.

Implementation Date: A Term 2023

Contact: Joseph Cullon, Associate Head for the Humanities, Department of Humanities and Arts, jcullon@wpi.edu

Appendix to the Motion - Assessment Data from Experimental Course Offerings:

A Term 2021 course evals

Q1 - 3.4
Q2 - 3.6
Q7 - 3.3
Q19 - 3.0

C Term 2022 course evals

Q1 - 3.7
Q2 - 3.3
Q7 - 3.3
Q19 - 2.7

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add SOC 1500: The Sociology of Race

Motion: On behalf of the Social Sciences and Policy Studies Department, the Committee on Academic Operations recommends, and I move that the course SOC 1500: The Sociology of Race, as described below, be added.

Proposed Course Description:

SOC 1500: The Sociology of Race (Cat. II)

This course introduces students to the sociology of race. The sociology of race examines how and why social, cultural, and historical forces combine to reproduce racism, racial discrimination, and racial inequality. What are the distinctions between race and ethnicity? What distinguishes, if at all, individual, institutional, structural, and cultural racism? What are racial formation, antiracism, pigmentocracy, and Whiteness? What role did W. E. B. Du Bois play in founding sociology in the US? Why has Du Bois and his theoretical contributions been erased from the history of sociology? What works best represent Du Bois's thoughts on the meaning of race and race relations? What is the relationship between Du Bois, the Atlanta School, and the sociology of race? To answer these questions, students will examine a range of primary, secondary, and tertiary texts and become familiar with the conceptual theories and research methods that inform the sociology of race and Du Bois's pioneering role in the field of sociology. Students will learn to think critically about the aims of the sociology of race and the theoretical means used to achieve those aims.

Recommended background: None

Intended audience: Students interested in sociology, African studies, and social sciences

Anticipated Instructor: Prof. Trent Masiki

Preferred term: B Term

Expected enrollment: 30

Course type: Lecture/Seminar

Rationale:

The course will (1) to provide students with the socio-historical consciousness needed to be effective global citizens, (2) to expose students to ethnoracial diversity in the social sciences, and (3) to provide students with the cultural sensitivity to complement their preparation global project work in Africa and the African diaspora.

Resource Needs:

- Information on the instructor (e.g., Prof. Masiki is qualified to teach the course)
- Classroom for 30 students, with projectors, white boards, and movable chairs and desks
- Laboratory (none needed)
- Library resources (Normal support)
- Information Technology (Normal support)

Impact on Distribution Requirements and Other Courses: This course will provide another option for students to fulfill the social science requirement and the program in Africana studies.

Assessment:

- WPI Course Evaluations: questions 1 ,2, 9, and 26
- Instructor reflection and periodic mini surveys to gather student feedback

Implementation Date: Academic Years 2023 and 2024 during B Term.

Contact: Prof. Rob Krueger

Date: April 18, 2023
To: WPI Faculty
From: Committee on Academic Operations (Prof. Srinivasan, Chair)
Re: Motion to add SOC 3500: African American Political Thought

Motion: On behalf of the Social Sciences and Policy Studies Department, the Committee on Academic Operations recommends, and I move that the course SOC 3500: African American Political Thought, as described below, be added.

Proposed Course Description:

SOC 3500: African American Political Thought (Cat. II)

This course introduces students to the oral and written discourse of African American political leaders. Ranging from the 1800s to the present, the course examines representations of African American political thought in the speeches and letters of African Americans who have held leadership positions in political organizations or who have participated in electoral politics. Students will explore the ideological foundations of the major African American political movements, examining how their goals and objectives have been informed by combinations of various political ideologies: Pan-Africanism, nationalism, feminism, radicalism, liberalism, centrism, and conservatism. What roles did African American leaders play in the Abolitionist movement? Who were the leaders of classical and modern Black nationalism? Who were the leaders of the Pan-African Congresses? What is the relationship between religiosity and African American political leadership? What are the similarities and differences between the strategies and tactics of the Abolitionist, New Negro, Civil Rights, Black Power, Black Arts, and Black Lives Matter movements? To answer these questions, students will examine a range of primary, secondary, and tertiary texts and become familiar with the conceptual theories and research methods that inform the study of African American political thought and intellectual history. Students will learn to think critically about the relationship between African American political thought, identity, and behavior.

Recommended background: None

Intended audience: Students interested in sociology, African studies, and social sciences

Anticipated Instructor: Prof. Trent Masiki

Preferred term: D

Expected enrollment: 30

Course type: Lecture/Seminar

Rationale:

The course will (1) to provide students with the socio-historical consciousness needed to be effective global citizens, (2) to expose students to ethnoracial diversity in the social sciences, and (3) to provide students with the cultural sensitivity to complement their preparation global project work in Africa and the African diaspora.

Resource Needs:

- Information on the instructor (e.g., Prof. Masiki is qualified to teach the course)
- Classroom for 30 students, with projectors, white boards, and movable chairs and desks
- Laboratory (none needed)
- Library resources (Normal support)
- Information Technology (Normal support)

Impact on Distribution Requirements and Other Courses:

This course will provide another option for students to fulfill the social science requirement and may count towards the requirements for a future program in African and Africana studies.

Assessment:

- WPI Course Evaluations: questions 1, 2, 9, and 26
- Instructor reflection and periodic mini surveys to gather student feedback

Implementation Date: Academic Years 2023 and 2024 during D Term.

Contact: Prof. Rob Krueger

Date: April 18, 2023
To: WPI Faculty
From: Committee on Graduate Studies and Research (Prof. Medich, Chair)
Re: Motion to add DS 551: Reinforcement Learning

Motion: On behalf of the Data Science program, I move that DS 551: Reinforcement Learning, as described below, be added.

Proposed Course Description:

DS 551 Reinforcement Learning (3 credits)

Reinforcement Learning (RL) is an area of machine learning concerned with how agents take actions in an environment with a goal of maximizing some notion of “cumulative reward”. The problem, due to its generality, is studied in many disciplines, and applied in many domains, including robotics and industrial automation, marketing, education and training, health and medicine, text, speech, dialog systems, finance, among many others. In this course, we will cover topics including: Markov decision processes, reinforcement learning algorithms, value function approximation, actor-critics, policy gradient methods, representations for reinforcement learning (including deep learning), and inverse reinforcement learning. The course project(s) will require the implementation and application of many of the algorithms discussed in class.

Prerequisites: Machine Learning (CS 539), statistical learning at the level of DS 502/MA 543, and programming skills at the level of CS 5007.

Rationale:

The purpose of this course is to help students to (1) understand the key concepts and various models of Reinforcement Learning; (2) design, implement, and evaluate the core algorithms of Reinforcement Learning; and (3) apply and explore the state-of-the-art reinforcement learning algorithms in the course projects.

This course was offered four times as a special topic CS 525/DS 595: “Reinforcement Learning” in Fall 2019, Fall 2020, Spring 2022, and Fall 2022.

The following table shows the enrollment, and the average course report ratings students gave on Question #1 (overall course rating), Question #2 (instructor rating), Question #7 (The amount I learned from the course), Question #12 (well prepared to teach class) on a five-point scale for each class session offered in the previous two years (1 represents “Very Poor” and 5 represents “Excellent”).

Year	Term	Course	Course Title	Class Size	Q#1	Q#2	Q#7	Q#12
2019	Fall	CS525/DS595	Reinforcement Learning	32	4.8	4.8	4.6	4.8
2020	Fall	CS525/DS595	Reinforcement Learning	36	4.7	4.8	4.5	5.0
2022	Spring	CS525/DS595	Reinforcement Learning	36	4.5	4.4	4.4	4.7
2022	Fall	CS525/DS595	Reinforcement Learning	40	4.7	4.6	4.4	4.9

This table shows that although it was a special topic course, 32~40 students registered the course, indicating the popularity and the need of offering the course. Moreover, the capacity for the course when offered was 40, and it was always fully registered with a long waiting list of 10+ students.

Impact on Degree Requirements: The course will be offered as an elective course in the Data Science program. It will be offered in the Computer Science graduate program’s “AI” breadth bin.

Anticipated Instructors:

- Associate Professor Yanhua Li — he taught this course as a special topic in four times Fall 2019, Fall 2020, Spring 2022, and Fall 2022 (CS 525/DS 595), and taught Big Data Analytics (CS 586/ DS 504).
- Associate Professor Xiangnan Kong — he has taught Introduction to Data Science (DS501) and Machine Learning (CS539).

Resources Required:

- Classroom large enough to hold **50 students**, including a lecture with standard power and projector connections.
- Student access to a computing cluster, including GPU machines.

Assessment: The course will be assessed based on student course evaluations (including the outcomes of questions 1, 2, 7, 12) and instructors' feedback and reflections on whether the course met the course's learning objectives.

Implementation Date: The 2023-2024 academic year.