

WORCESTER POLYTECHNIC INSTITUTE

April 11, 2024

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

The eighth Faculty meeting of the 2023-2024 academic year will be held on **Thursday, April 11, 2024 at 3:15pm in OH 107 and by Zoom at: <https://wpi.zoom.us/j/93116202669>** . Refreshments will be available in OH 107 at 3:00pm.

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|---|---------------------------|
| 1. Call to Order | M. Richman |
| • Approval of the Agenda | |
| • Consideration of the Consent Agenda - including the minutes from Mar. 13, 2024 | |
| 2. Opening Announcements | M. Richman |
| 3. President's Report | G. Wang |
| 4. Committee Business: | |
| Committee on Information Technology Policy (CITP) | G. Smith |
| • Motion to revise the WPI Mailing List Policy | |
| Committee on Governance (COG) | G. Heineman |
| • Motion to clarify eligibility for election to faculty governance committees based on administrative title (for discussion, only) | |
| Committee on Governance (COG) | G. Heineman |
| Committee on Appointments and Promotions (COAP) | W. Martin |
| • Motion to provide guidelines for initiating searches for new Dept. Heads and for the appointments and terms of Interim Dept. Heads (for discussion only) | P. Weathers |
| Committee on Financial and Administrative Policy (FAP) | H. Walker |
| Fringe Benefits Committee (FBC) | R. Dempski |
| Committee on Governance (COG) | G. Heineman |
| • Motion to modify the membership on FBC and the representation in FBC deliberations (for discussion, only) | |
| 5. Committee Report: (for information and open discussion) | |
| Committee on Governance (COG) | |
| • Third Annual Report on WPI Faculty Populations and Clarification of Faculty Categories | G. Heineman
M. Richman |
| 6. New Business | |
| 7. Provost's Report | A. Heinricher |
| 8. Closing Announcements | |
| 9. Adjournment | |

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WORCESTER POLYTECHNIC INSTITUTE

Faculty Meeting Minutes

March 13, 2024

Summary:

1. Call to Order; Approval of the Consent Agenda and the Minutes of February 14, 2024
2. Secretary of the Faculty's Report and Opening Announcements
3. President's Report
4. Committee Business: CTAF/COG, COG, COAP/COG, CGSR
5. New Business
6. Provost's Report
7. Closing Announcements
8. Adjournment

Detail:

1. Call to Order

The seventh Faculty Meeting of the 2023-2024 academic year was called to order at 2:30 pm both in person and via ZOOM by **Prof. Richman** (AE). Prof. Richman reminded all those in attendance that the meeting was being recorded for the purpose of taking accurate minutes, only. The meeting agenda, the minutes from the Feb. 14 meeting, and the 35 CAO motions and the 10 CGSR motions in the consent agenda were approved as distributed. He thanked all those whose hard work went into developing and reviewing the consent agenda motions. He expressed hope we would be able to work through all items on today's very ambitious agenda.

2. Secretary of the Faculty's Report and Opening Announcements

Prof. Richman encouraged all those in attendance to attend the President's inauguration on March 22.

Prof. Richman thanked both Prof. Boudreau and Prof. Claypool for their willingness to serve as our next Secretary of the Faculty. The decision to have one's name appear on the final ballot is in itself a significant commitment to the University. Prof. Richman congratulated Prof. Claypool, who will be our next Secretary of the Faculty and will look forward to the support of the entire WPI faculty.

Prof. Richman also explained that after an elaborate nomination process, we are finalizing the election ballots for COG, CTAF, and COAP. Following those elections, COG will solicit nominations campus-wide and will start constructing balanced ballots for the remaining at-large faculty governance committees. The intention is to complete all elections by the end of D-term.

Prof. Richman congratulated all 31 our colleagues who were recently tenured and/or promoted. Of them, 16 colleagues were tenured and an additional 15 were promoted separately. Prof. Richman reflected not only on the individual achievements of those who were rewarded, but also on the nature of the institutional effort required to conduct the reviews in a confidential yet fair and transparent manner that demonstrates the crucial role that faculty governance plays at WPI and the strength of our faculty governance structures. Finally, Prof. Richman pointed out for special recognition that nine of those who received tenure comprise our very first cohort of tenured Professors of Teaching.

Prof. Richman pointed out that the next faculty meeting is on April 11th on a Thursday at the traditional 3:15pm.

3. President's Report

President Wang thanked Prof. Richman for his time, service, and leadership as the Secretary of the Faculty. She also thanked both Prof. Boudreau and Prof. Claypool for appearing on the SOF ballot, and she looked forward to working with the next SOF. President Wang congratulated all 31 faculty colleagues for the milestone of tenure and promotion, and she thanked all our colleagues, including the Provost, who worked behind the scenes to review the candidates' files. President Wang congratulated the nine faculty members who received tenure on the teaching

path, and she recognized Provost Heinricher and Prof. Richman for their thought leadership in promoting the excellence of our faculty.

President Wang added that WPI has received the 2023 Award for Undergraduate Research Accomplishments from the Council of Undergraduate Research. She thanked Provost Heinricher, Dean Gericke, all the Deans, and all the faculty who were so instrumental in WPI's efforts to gain recognition. She also pointed out that WPI has received the 2024 Senator Paul Simon Spotlight Award for Campus Internationalization from NAFSA: Association of International Educators. She congratulated Dean Sheller and all those responsible for WPI's contributions in achieving this recognition.

President Wang spoke about developing WPI's strategy to expand our research activities. As part of that strategy, internal seed funding is now available that can lead to externally funded Center-scale research grants. While we shouldn't set any strict institutional research priorities, we do need to focus our efforts when we seek external funds for large-scale high-impact research. In this context, our three areas of strength and potential growth based on available state and federal funding are in three groupings: life sciences; the related areas of computer science, artificial intelligence, machine learning, data analytics, robotics; and in advanced materials, sustainability and the mechanical engineering and electrical engineering elements of related processes.

President Wang emphasized that we need to improve our institutional fundraising to increase the endowment for scholarships and for endowed/chaired professorships. President Wang praised WPI's University Advancement team for their work so far this year, and she indicated that she will announce a significant success at her inauguration next week. President Wang also emphasized the importance of the faculty in transforming the lives of our students who, as alumni, then form an excited donor base.

4. Committee Business

Committee on Tenure and Academic Freedom (CTAF) and the Committee on Governance (COG)

Prof. Heineman (CS, COG Chair) and **Prof. Claypool** (CS, COG member) presented on behalf of CTAF and COG. Prof. Heineman moved, on behalf of CTAF and COG, that a formal procedure to resolve allegations of academic freedom violations be incorporated into the Faculty Handbook by (a) modifying parts of CHAPTER ONE, BYLAW THREE, Section II and CHAPTER THREE, Section 2.c.ii related to academic freedom; and (b) inserting into CHAPTER FIVE a new Section 1: Procedure for Complaints of Academic Freedom Violations, as described in the meeting materials. (See **Addendum #1** on file with these minutes.)

Prof. Claypool provided a broad overview of the proposal because many of the details had already been presented at the Nov. 8 faculty meeting. Since then, lots of feedback from faculty and trustees have been gathered and incorporated into the current motion. The key features of the process are as follows: encouraging informal resolution; balancing investigation with protection of the complainant; and resolving confirmed violations with a management plan. The process applies to all faculty members at WPI.

Prof. Claypool described both the clarifications and the changes that have been made since Nov. 8. The clarifications are related to the following issues: rules for conflict of interest and confidentiality; "relevant individuals" are not determined by complainant; rules on AFS voting during decision phase; conveyance of outcomes of the preliminary finding and final decision; interviewees are anonymized in the AFS report to Provost; elaboration on interactions between AFS and Provost in the resolution phase; and if the management plan is not effective, then the complainant can file a new complaint. The changes are as follows: the President replaces the Provost if the Provost is conflicted; the mediator and the AFS Chair decide if Provost needs to approve the mediation settlement; the complainant can also request informal resolution during investigation or decision phases; and the Provost maintains confidential records on all management plans.

Prof. Krueger (SSPS) wanted the process to be fair to all parties and asked who is considered a relevant individual. He moved that the motion be amended as follows (with text to be deleted ~~struck through~~):

II.c Decision Phase

2. Confirmation of Preliminary Finding: If there are additional relevant individuals (as determined by the AFS, not the complainant) who have not yet been interviewed (e.g., so as to protect the complainant),

the AFS will conduct those interviews and review any relevant materials that are identified through those interviews.

The motion was seconded. **Prof. Claypool** explained that the text as proposed in the original motion made it clear that the complainant should not be the individual to determine who the relevant parties are in the case, that it was important for clarity that the policy specify who would make that determination, and that the investigating subcommittee (the AFS) - with all the evidence available to it - was the appropriate body to make this determination.

Prof. Ruiz (CS) was in favor of the amendment. She thought that everyone who is mentioned in the complaint is a relevant party.

Prof. Smith (IMGD) was against the amendment. In her view, the policy is and should be based on trust in the AFS quite throughout the process, so it made sense to her that we would trust them with this determination. She thought that defining who is a relevant party is an entirely different matter.

Prof. Boudreau (HUA) was against the amendment because she hasn't heard a clear rationale for taking out the parentheticals. She agreed with Prof. Claypool that the AFS should make the judgement about relevant parties.

Prof. Heineman expressed his view that the policy places trust in the AFS, which is consistent with the trust we place in CTAF and COAP in all their deliberations.

Prof. Krueger (SSPS) thought that all named individuals to be spoken to as part of the process.

Prof. Ahrens (CS) asked how the process would work if the AFS decided to interview only a subgroup of those individuals named in complaint and the complainant disagreed. **Prof. Claypool** explained that there is no reference in the policy to named individuals. This is because the policy is not intended to identify guilty parties. The complainant may simply provide the names of people who can shed further light on the matter. As a result, relevant parties might include individuals who have not been named. The point is not to name guilty parties, but rather to gather all needed information.

Prof. Hansen (HUA) asked what the second parenthetical means. **Prof. Claypool** explained that the policy is written to give assurances to vulnerable faculty members that they will be protected in filing the complaint. So the second parenthetical gives assurance to the complainant that they could at least get to this stage in the process before additional individuals would be interviewed. The point of this was to further reassure the faculty members. **Prof. Heineman** pointed out that this also gives some guidance to the AFS as a reminder that they can protect the complainant until this stage in the process.

A motion to end discussion (on the motion to amend) was seconded and passed.

The motion to amendment did not pass.

Prof. Sturm (MA) explained that this motion was very positive and it is a significant step forward. He was in favor of the motion but he was concerned about the vulnerability that remained for faculty members on short-term contracts, who may have been terminated and have left WPI before the process could conclude. He hoped that this issue can be addressed in the short-term future.

The motion passed.

Committee on Governance (COG)

Prof. Heineman (CS, COG Chair), on behalf of COG, moved that CHAPTER FIVE of the Faculty Handbook and the Faculty Grievance Procedure in CHAPTER FIVE be modified, as described in the meeting materials. (See **Addendum #2** on file with these minutes.)

Prof. Heineman explained that the new procedure for complaints of academic freedom violations (CHAPTER FIVE, Section 1) that the faculty just approved in the previous motion will now be followed for all complaints of academic freedom violations. This current motion, therefore, removes from the Faculty Grievance Procedure any grounds related to academic freedom violations so there are not two committees – CTAF and FRC – with two different procedures to investigate the same allegations.

Prof. Spanagel (HUA) asked if the faculty grievance procedure as modified by this proposal would still include grounds due to procedural violations. **Prof. Heineman** clarified that the only wording that would be removed is related to academic freedom violations, but that all other grounds – including for procedural violations - for which a faculty grievance could be filed remain.

The motion passed.

Committee on Appointments and Promotions (COAP) and Committee on Governance (COG)

Prof. Heineman (CS, COG Chair), on behalf of COG and COAP, moved that the language describing the promotion dossier (in the Faculty Handbook, Chapter Four, Section 3.b) be modified to add guidance for candidates from promotion to (full) Teaching Professor and Associate Teaching Professor in preparation of the promotion dossier, and to include page limits for the candidates; personal and reflective statements, as described in the meeting materials. (See **Addendum #3** on file with these minutes.)

As he had done at the Feb. 14 faculty meeting last month, **Prof. Heineman** explained that the motion was due in large part because, while Chapter Four, Section 3.b of the Faculty Handbook unifies the procedures that apply to promotion in four cases (i.e. to (full) Professor; to (full) Professor of Teaching, to (full) Teaching Professor, and to Associate Teaching Professor), the section provides no *explicit* guidance in the latter two promotion cases (to (full) Teaching Professor and to Associate Teaching Professor). The motion would add such guidance to the descriptions of the CV, the personal statement, the teaching portfolios, and the sample artifacts to be submitted by the candidate. In addition, the motion adds two statements related to the general assessment standard used in the cases of promotion to Associate Teaching Professor and to (full) Teaching Professor and Associate Professor, and it elaborates on what is assessed as “service” in the promotion to (full) Professor and to (full) Professor of Teaching.

The motion passed.

Committee on Appointments and Promotions (COAP) and Committee on Governance (COG)

Prof. Heineman (CS, COG Chair), on behalf of COG and COAP, moved that the language describing “Performance Evaluations of Department Heads” (in the Faculty Handbook, Chapter Two, Section 5.c, Sub-sections, ii and iii) be modified to include interim Department Heads who are in their second year and to update the description of the manner in which the Department Head Evaluation questionnaire is distributed, as described in the meeting materials. (See **Addendum #4** on file with these minutes.)

Prof. Shue (CS) moved that the motion be amended as follows (with text to be added highlighted in blue):

5. ROLES AND RESPONSIBILITIES, INITIAL APPOINTMENTS, EVALUATIONS, AND REAPPOINTMENTS OF DEPARTMENT HEADS

c. Performance Evaluations of Department Heads:

- ii. *Schedule of Evaluations:* Performance evaluations for each Department Head are conducted during the spring of both the second and fourth year of the first five-year appointment, during the spring of only the second year of the second five-year appointment, evaluations will be conducted only in the second year of the appointment and during the spring of the second, fourth, and seventh year of any interim appointment. In addition, the Dean, the Committee on Appointments and Promotions, or the Department Head may request an evaluation at any time. A list of the regular schedule for Department Head evaluations is maintained by the Committee on Appointments and Promotions.

The motion was seconded. Prof. Shue explained that he thought COAP wanted to normalize long-term interim Department Head appointments, and this amendment would allow their evaluations to occur in the later years indicated.

Prof. Martin (MA, Co-Chair COAP) did not understand how a fourth and seventh year could apply to an interim Department Head appointment.

Prof Boudreau (HUA) spoke against the amendment and questioned the premise that, by formalizing a second-year review of interim Department Heads, COAP was trying to normalize long-term interim appointments. She thought that COAP was trying to deal with a current reality, and that no purpose would be served by a first review in the fourth year.

Prof. Weathers (BBT, Co-Chair COAP) emphasized that it is not COAP's intention to normalize long-term interim Department Heads. In her view, such appointments detract from the ability of a department to have solid, regular leadership. COAP has been reviewing interim Department Heads after they have served two-years because such appointments have become more common at WPI. If it becomes common for Department Heads to serve even longer, then COAP will jump in again, but COAP is hoping that will not be necessary. **Prof. Heineman** agreed that having long-term interims in place posed many departmental challenges. He indicated that it is COG's intention to work with COAP to bring a motion to the faculty very soon that would address the terms and appointments of interim Department Heads.

Prof. Shue asked what the review process would be for an interim Department Head who was in place for four years. **Prof. Heineman** suggested that this issue would be addressed if we were to update the Faculty Handbook by adopting a limit on the terms of interim Department Heads.

Prof. Petkie (PH) thought that formalizing the evaluation of an interim Department Head at the end of their second year seems to be encouraging them to continue into a third and fourth year, and if they were not to continue then he saw no reason to conduct such an evaluation. **Prof. Heineman** thought that the two-year evaluations also give a general sense of how the department is running.

Prof. Wobbe (DIGS) added that all feedback is developmental. So, even if the feedback may not apply to future work as a Department Head, it could be applied to preparation for other leadership positions.

Prof. Smith (IMGD) asked if and how the two years of service as an interim Department Head would be counted toward the full five-year appointment if the interim department head were to then receive a full five-year appointment. **Prof. Heineman** explained that normally the five-year appointment would not include the years served in the interim position.

The motion to amend did not pass.

Prof. Gericke (interim Dean, UGS) suggested that the general review process for Department Heads be amended to allow the Department Head to read the summary letter written by COAP. After consulting with the Parliamentarian Hanlan (HUA), **Prof. Richman** ruled that the proposed amendment was to text that had been included only to provide greater context for the reader, but that the amendment did not apply to the substance of the main motion. For this reason, the amendment was not permitted. Prof. Richman emphasized that the ruling was independent of the merits of the suggestion.

Prof. Hansen (HUA) thought that the summary letter sent by the Dean to the Department Head as part of the regular evaluation was not equivalent to the letter from COAP written earlier in the evaluation process, and he was against the main motion.

Prof. Shue (CS) asked if the minor stylistic modification to the sentence preceding the sentence concerning access to COAP's letter was enough to permit the motion to amend. After consulting with the Parliamentarian Hanlan (HUA), **Prof. Richman** affirmed that it was not. In response to a procedural question from **Prof. Smith** (IMGD), Prof. Richman explained that if the motion were tabled, then it would be brought back next month, when there might also be a motion to consider from COG and COAP concerning the terms of interim Department Heads.

The motion passed.

Prof. Weathers (BBT) explained that great care must be taken in deciding who may read COAP's letter. COAP's goal is to maintain faculty confidence, and the concern with being more open is that they will lose faculty feedback.

A motion to extend the meeting for 15 minutes was seconded and passed.

Committee on Graduate Studies and Research (CGSR)

Prof. Olson (MA, Chair, CGSR), on behalf of CGSR, moved that a Ph.D. program in Financial Technology be established (including one new course FIN 698 Directed Research), as described in the meeting materials. (See **Addendum #5** on file with these minutes.)

Prof. Zhu (BUS) explained that as FinTech has grown, it has created demand for professionals with advanced skills in finance, mathematics, programming, analytics, data science, applied statistics, and regulatory and compliance

expertise. In addition, WPI has established a reputation in FinTech, aided by our Wall Street Project Center. The proposed program would be the first Ph.D. in FinTech in the U.S. It is a mentorship-based program rather than a course-based program, with each student working out an individual plan of study with their advisor. Except for the addition of one Directed Research course (FIN 698), which can be taken multiple times, no new courses are needed to support the new program. The admissions requirements and total credit requirements are the same as the current Ph.D. program in the Business School. Preliminary recruitment of students for fall 2024 indicates that there are already several students interested in applying to the program with no funding needed from WPI.

The motion passed.

Committee on Graduate Studies and Research (CGSR)

Prof. Neamtu (CS), on behalf of the Committee on Graduate Studies and Research, moved that the Collaborative Accelerated Master's Programs (CAMPs) Framework between the College of Holy Cross and WPI be established, as described in the meeting materials.

Prof. Ruiz (CS) reviewed the general idea of CAMPs, which is for students to complete their bachelor's degrees at a partner institution (in this case, Holy Cross) and then continue their studies toward a master's degree at WPI, with credit earned in two courses completed while at the partner institution to be counted toward their WPI MS degrees. This motion uses the template that was approved at the Feb. 14 faculty meeting, in this case to establish a framework for such a partnership with Holy Cross College.

The motion passed.

5. New Business

Prof. Boudreau (HUA) explained that she had misheard the wording of Prof. Shue's amendment concerning two-year reviews of interim Department Heads, and she apologized to him.

6. Provost's Report

Provost Heinricher thanked Prof. Claypool for his upcoming term as Secretary of the Faculty. He reminded everyone about the President's inauguration next week. He congratulated all those faculty members who were recently tenured and/or promoted. Provost Heinricher emphasized that our institutional goal is specifically not to have interim Department Heads.

Provost Heinricher encouraged all faculty to volunteer when called upon to serve in faculty governance. He concluded by reflecting on his past service as a faculty member of CTAF, and he described it as fundamental to how he came to understand WPI and how we form a strong faculty community.

7. Closing Announcements

There were no closing announcements.

8. Adjournment

The meeting was adjourned at 4:10pm by **Prof. Richman**.

Respectfully submitted,

Mark Richman
Secretary of the Faculty

Addenda on file with these minutes:

Addendum #1 - CTAF-COG Motion for Complaints of Acad Freedom Violations - Minutes March 13 2024

Addendum #2 - COG Motion to Modify the Faculty Grievance Procedure - Minutes March 13 2024

Addendum #3 - COAP-COG Motion on Guidance for Teaching Professors - Minutes March 13 2024

Addendum #4 - COAP-COG Motion on Interim Dept Head Reviews - March 13 2024

Addendum #5 - CGSR Motion on PhD in FinTech - Minutes March 13 2024

Addendum #6 - CGSR Motion on CAMPs Framework with Holy Cross - Minutes March 13 2024

Date: April 11, 2024

To: WPI Faculty

From: Committee on Information Technology Policy (Prof. Smith, Chair)

Re: Motion to revise the WPI Mailing List Policy

Motion: The Committee on Information Technology Policy recommends, and I move that the WPI Mailing List Policy be updated as described below:

Description of the Motion:

Overview: The proposed revised policy would clarify the mechanisms by which mailing lists are generated, detail the responsibilities and authority of mailing list owners with respect to lists, and define reasonable and clear guidelines for the deletion of mailing lists due to misuse or disuse. This is the policy's first review and revision by CITP. The current policy was put in place by the Information Security, Risk, and Compliance (ISRC) Committee, which has since been disbanded.

The information provided in this description of the motion includes the proposed revised policy, followed by the current policy. Due to significant changes to the policy across the document, changes are not marked in the copy of the current policy provided.

PROPOSED - Dynamic Distribution Mailing List Policy

I. Policy Statement

The purpose of this policy is to provide rules on how to create, use, and moderate mailing lists using WPI's IT systems and resources.

II. Scope

This policy applies to all users of WPI dynamic distribution (dl- and adv-) lists, as defined below. All use of these mailing lists must comply with the WPI Acceptable Use Policy (AUP) as well as the guidelines in this policy; any violations of the Mailing List Policy will be treated as a violation of the Acceptable Use Policy (AUP).

This policy does not govern the usage of third-party software to manage mailing lists, nor does it govern the usage of individually-managed groups (which may often be colloquially referred to as "mailing lists").

III. Definitions

Dynamic distribution list: A dynamic distribution list is a mailing list that is automatically generated based upon data stored in WPI's IT systems (e.g. Workday). This includes mailing lists for academic units (majors, minors, grads), employee mailing lists, and advising mailing lists. Dynamic distribution lists are prefixed with *dl-*, or—in the case of advising lists—with *adv-*. Criteria for membership in the lists is determined by the list owner, and can include manually added or removed members in addition to the automatically generated list population. List membership is managed and maintained by ITS.

Individually-managed groups: An individually-created group is any list created by an individual member of the community, currently through using Outlook 365's "groups" feature. Membership in these groups is manually managed by the owner(s) of the group. Groups also provide an email address that reaches all group membership, which is prefixed with *gr-*.

Personal alias: A personal alias is an alternate email ID for an individual.

Shared mailbox: An email mailbox that multiple WPI users have access to.

Guest Recipients: A guest recipient is a member of a WPI mailing list (either dynamic or individually-created) who is not affiliated with WPI and has an email address outside wpi.edu.

IV. Policy

A. List Creation

Dynamic distribution lists are generated by ITS following a request for creation via a Service Desk ticket. Staff and faculty may request the creation of new dynamic distribution lists; approval for this request should come from a supervisor (staff) or department head/ or their designee (faculty).

Upon request, ITS staff will work with the requester to determine whether an existing dynamic distribution list already meets the purposes of the request. If not, and if the list is judged to meet the guidelines outlined in this policy, ITS will create the list.

The primary purpose of a mailing list should be to facilitate communication among multiple WPI community members. While any community member is welcome to request list creation, they are also encouraged to investigate first to find out if there is an existing mailing list that serves the same purpose. Mailing lists should not be created in lieu of a personal alias; lists with only one individual member are not permitted.

Dynamic distribution lists cannot have guest recipients. Community members who wish to create lists that reach people outside of WPI are encouraged to either create an individually-managed group, or investigate third-party list management options.

B. List Ownership

Dynamic distribution list ownership records are maintained by ITS and available for the WPI community to view upon request. List ownership is determined in conjunction with the list requester, their supervisor and/or department head/program director, and—when list membership spans multiple WPI divisions—the leaders of these divisions.

Some dynamic distribution lists are permanent (e.g. dl-students, dl-staff, dl-faculty). Records of list ownership are maintained by CITP in collaboration with ITS; requests for changes to ownership of these lists goes to CITP, who will engage with units on campus as necessary given the scope of the list.¹

Dynamic distribution lists that are associated with academic departments or programs have the department head or program director as list owner. This includes majors, minors, and graduate student mailing lists.

Dynamic distribution lists generated for advising purposes (i.e. *adv*- prefixed lists) are owned by the Office of Academic Advising.

Dynamic distribution lists for individual classes have the instructor of record as list owner.

C. List Naming

List names are set at creation time and cannot be changed. Distribution list names will automatically have the prefix *dl*-. ITS also manages academic advising lists (prefixed *adv*-) and automatically-generated course lists. Prefixes cannot be changed or removed.

¹ The exception to this policy is the dl-potpourri mailing list, which all employees join by default. potpourri is an opt-out mailing list with no list owner; opt-out options will be clearly marked on communications sent to the list.

List names must have a minimum of four characters, not including the prefix. Names should include only the characters: a-z, 0-9, and hyphen. These restrictions are in place to support legacy IT systems where Unicode characters are not supported.

List names must be in compliance with WPI's Student Code of Conduct, Code of Business Ethics and Conduct, and Acceptable User Policy. In particular, list names must not use or contain slurs, demeaning language, or be used for harassment.

D. List Management

All mailing lists have named list owners and stated list purposes, which are recorded in the list management system. List owners have responsibility to:

- Define the list population and clearly communicate this population with ITS.
- Alert ITS to potential problems with list membership and automation if such problems are discovered. List owners may request manual additions/removals from the list.
- Determine an appropriate approach to list management for the community the list serves, in terms of both membership criteria (e.g. permitting opt-in and opt-out membership) and posting to the list (e.g. moderation queues, approved senders, or a fully open list).
- Report suspected violations of the AUP on the mailing list through the appropriate channels specified in that policy.
- Transfer ownership of the list upon a change in role or departure from WPI.
- Request the removal of the list if it is no longer needed.

ITS has the responsibility to:

- Proactively maintain the internal mechanisms that populate dynamic mailing lists based upon internal data for accuracy and reliability.
- Ensure that changes made to underlying internal data are reflected on a dynamic mailing list within 1 business day.
- Respond to requests from list owners regarding list maintenance tasks, and provide technical support for mailing list services named in this policy.
- Periodically, and on request, provide list membership information to a list owner in a user-friendly and accessible format.
- Create mailing lists upon requests that are in accord with this policy.
- Communicate with the list owner when changes to the underlying mailing list service may impact list operations.
- Communicate with the owner and when list subscription requests are made to IT that require list owner approval.

E. List Review and Deletion Guidelines

Mailing lists will be flagged by IT for review if the list:

- has not been used for more than twelve months, according to automated usage records,
- generates bounces due to invalid recipient addresses,

- has no owner (i.e. owner has left WPI without transferring ownership, and there is no clear subsequent list owner),
- violates the usage policy.

If a list is flagged for deletion, IT will reach out to the list owner to either remedy problems with the list or confirm list deletion. If there is no list owner, or if the list owner is no longer at WPI, IT will contact the original owner's supervising office to either remedy the problems with the list or confirm list deletion.

F. List Usage Guidelines

Emails sent to a list should focus on the stated purpose of the list. All communications on a WPI mailing list are subject to the WPI Acceptable Use Policy.

Recipients who are part of the WPI community (have a wpi.edu address) must use their wpi.edu address in the list and not an alternate address.

G. Specifically Prohibited Activities

The following activities are prohibited. If discovered, IT will contact the list owner to navigate alternate solutions, prior to removal of the mailing list:

- Creating or using a list as an alias for yourself
- Creating or using a list to masquerade as another person, group, list, service, or other entity.
- Creating a list to reserve the name without actively using the list.
- Creating a list to use as a forwarding technique.
- Using a list as an alias for obtaining services internal or external to WPI; users who need this functionality should contact ITS for alternate solutions such as a shared mailbox.

H. Questions

Address any questions and exception requests using a Service Desk request. Report any suspected violations of the policy to the Office of Information Security.

Responsible Department: Information Technologies Services

Policy Review: Committee on IT Policy (12/18/23); Administrative Policy Group (3/27/24); WPI Faculty (date)

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

CURRENT - Information Security, Risk, and Compliance (ISRC) Committee- Designed Policy

[modified only for formatting]

WPI Mailing List Policy

1.0 Purpose

The purpose of the policy is to provide guidance on how to create and use mailing lists.

2.0 Applicability

This policy applies to all users of WPI mailing lists for students, faculty and staff. All use of mailing lists must comply with the *WPI Acceptable Use Policy (AUP)* and *Common Electronic Mail Standard*. In addition, there are specific guidelines and prohibited activities.

3.0 List Creation & Usage

List Creation Guidelines:

- The primary purpose of a mailing list must be to facilitate communication among WPI community members. Only request a new list when necessary. There may already be a list or alternate mechanism for your intended purpose.
- Dynamic Distribution Lists will be created upon request via a Help Desk ticket provided the list meets these guidelines.
- Personal mailing lists can be created by faculty, staff or students through Office 365 Groups. If the list will have guest recipients (non-wpi.edu email address), then the list must be an Office 365 Group.
- A mailing list must not be used as a personal alias (defined below).

List naming guidelines

- Office 365 distribution list names will have the prefix 'dl-'.
- Office 365 Group names will have the prefix "gr-'.
- List names must have a minimum of four characters, not including the prefix.
- Names should include only the characters: a-z, 0-9, and hyphen.
- List names should not masquerade as another person, group, list, service, or other entity.
- List names must be in compliance with WPI's *ethics* and *Code of Conduct* policies (i.e. not offensive, harassing, etc.).

List Management Guidelines

- List owner(s) are responsible for maintaining the accuracy of the list, transferring ownership prior to leaving WPI and removing a list when it is no longer needed.
- Lists with guest recipients must be maintained for accuracy by the list owner.
- Recipients who are part of the WPI community (have a wpi.edu address) must use their wpi.edu address in the list and not an alternate address.
- Lists will be flagged for removal if:
 - The list has not been used for more than six months.
 - Has a predominance of guest recipients without a clear purpose.
 - Generates bounces due to invalid recipient addresses.
 - Has no owner (owner has left WPI without transferring ownership).
 - Violates the usage policy.

List Usage Guidelines

- Emails sent to a list should focus on the stated purpose of the list.
- Emails should comply with the *Common Electronic Mail Standard*.

Personal Aliases

A personal alias is an alternate address for a primary address. The mailing list service should not be used to generate personal aliases. If you need a personal alias for a legitimate reason, please submit a *Service Desk request* to make an alias as part of your email identity, including the reason for the request.

Valid reasons for requesting a personal alias:

- Change of name
- Frequent confusion with another user
- Cultural sensitivity to assigned name or number
- Other valid reasons per management approval

Specifically Prohibited Activities under this policy

1. Creating or using a list as an alias for yourself.
2. Creating or using a list to masquerade as another person, group, list, service, or other entity.
3. Creating a list to reserve the name without actively using the list.
4. Creating a list to use as a forwarding technique.
5. Using a list as an alias for obtaining services internal or external to WPI.

Exceptions

Exceptions to the Mailing List Standard are granted on a case-by-case basis. Information Technology staff will work with the requestor to help determine an acceptable solution. Exceptions for academic coursework can be requested by a faculty member.

Reporting, Questions, and Assistance

Address any questions and exception requests using a Service Desk request. Report any suspected violations of the standard to the Office of Information Security at itsecurity@wpi.edu.

4.0 Policy Enforcement

Any person that violates any of the policies found in this policy will be subject to the same disciplinary actions as outlined in *WPI's Confidentiality Agreement* for employees or *Code of Conduct* for students.

5.0 Approval and Revisions

Policy Category: Information Technology

Policy Approved By: Approved by WPI's Information Security, Risk and Compliance Committee on 9/6/2018.

Policy Reviewed Annually By: Mark Taricco

Related University Policies:

WPI Acceptable Use Policy (AUP)
Common Electronic Mail Standard

Last Modified: 8/20/18

Rationale:

The existing mailing list policy was created and last updated in 2018. Since then, WPI has had several years of experience with dynamically created lists across campus, revealing several problems we aim to address in this policy revision:

- In 2021-22, there were several issues with the accuracy of student mailing lists as an indirect result of the Workday Student transition. Debugging and resolving these issues made clear the need for better policy and shared language for mailing list creation and maintenance, including where responsibilities lie in determining membership and ensuring reliability.
- In 2022-23, we started hearing complaints from students and faculty alike about heavy email traffic on large mailing lists (e.g. majors with large enrollment). Some list owners and members requested list moderation, for which there was no policy guidance.
- IT reports issues with long-disbanded mailing lists (i.e. created long ago, no activity reported, and no current list owner) still being on WPI servers, causing resource and security issues. IT further reports that the help desk receives requests to join mailing lists, and that their staff should not make these decisions and have no guidance for where to direct such requests.

In parallel with discussing and offering guidance on these issues, CITP has been conducting a review of policies generated by the Information Security, Risk, and Compliance Committee (ISRC) that did not engage with faculty governance. The current Mailing List Policy was one such policy, and CITP identified several issues that the revised policy addresses:

- Links to outdated “standards”, which contain implicit policy language related to appropriate messages to send to lists
- Inaccurately labels dl- lists as Office 365 lists, and has other outdated/incorrect language
- Does not clearly establish responsibilities for list maintenance
- Terse language with rules that do not have clear explanation or justification

The revised policy aims to address these issues through:

- Updating definitions of lists to be accurate to current practice
- Establishing clear roles and responsibilities for both list owners and ITS
- Defining list owners for specific, large, and permanent dynamic distribution lists to be offices on campus, rather than specific individuals, for long-term consistency

Note: For discussion, only.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Governance (Prof. Heineman, Chair)

Re:

Motion: The Committee on Governance (COG) recommends, and I move that Chapter One, Section One (Definition of the Faculty) and Chapter One, Bylaw Two, Section II (Membership and Officers of Faculty Committees) of the Faculty Handbook be modified to designate by administrative title those faculty members who are also members of the Administration and to clarify eligibility for election to faculty governance committees, as described below.

Description of the Proposed Modifications:

(Text to be added is highlighted in yellow. Text removed is ~~struck out.~~)

Faculty Handbook: Motion to clarify eligibility for election to faculty governance committees based on administrative title

Chapter One – GOVERNANCE: CONSTITUTION AND BYLAWS OF THE WPI FACULTY

Section One – DEFINITION AND GOVERNANCE OF THE FACULTY

(Text to be added is highlighted in yellow.)

DEFINITION OF THE FACULTY

The Faculty of Worcester Polytechnic Institute consists of all those individuals who hold tenured, tenure-track, or full time nontenure-track faculty appointments. Tenured and tenure-track faculty members are the President, the Provost, and those individuals holding full-time appointments with the following exact titles: Professor, Associate Professor, Assistant Professor, Professor of Teaching, Associate Professor of Teaching, and Assistant Professor of Teaching. Full-time nontenure-track faculty members are those individuals holding full-time appointments with the following exact titles: Teaching Professor, Associate Teaching Professor, Assistant Teaching Professor, Senior Instructor, Instructor, Professor of Practice, Research Professor, Associate Research Professor, and Assistant Research Professor. Any faculty member who also holds the administrative title of President, Provost, Associate or Vice Provost, Dean, or Associate Dean is also a member of the Administration.

Faculty Handbook:

Chapter One – GOVERNANCE: CONSTITUTION AND BYLAWS OF THE WPI FACULTY

Bylaw Two – GENERAL RULES FOR COMMITTEES OF THE FACULTY

Section II - Membership and Officers of Faculty Committees

(Text to be added is highlighted in yellow. Text removed is ~~struck out.~~)

Membership and Officers of Faculty Committees

Committees of the Faculty, whether standing or *ad hoc*, may consist of members of the Faculty, members of the Administration, and WPI students. Faculty members of committees are elected by the Faculty or appointed by the President or Provost or a committee of the Faculty charged with this responsibility. In any case, the majority of faculty members on any committee must be elected by the Faculty. All full-time faculty members (including Department Heads) who are tenured, are on the tenure track, or hold non-temporary secured nontenure-track teaching appointments that are made with provisions for a long-term institutional commitment from WPI who are not members of the Administration are eligible to be elected. Faculty members who are also members of the Administration are ineligible to be elected. If the membership of a committee is to include members of the Administration, such members may be either explicitly identified as *ex officio* or may be appointed by the President or Provost, when the appointed member is explicitly identified as a representative of the Administration or of an

Administrative Division or Office, according to the as appropriate procedure described in this Faculty Handbook. Student members of faculty committees are selected annually by the students, with the students determining the procedures.

Rationale:

This motion would clarify which faculty members are eligible and ineligible for election to our Faculty Governance committees. The existing confusion has centered on the eligibility of members of our faculty who also have formal administrative responsibilities. The problem has been due in large part to an implicit expectation that some cutoff on the percentage of time spent on administrative responsibilities will provide the distinction between those faculty members who are eligible for election and those who are not. However, oftentimes those percentages are not exactly known or specified, and in any case a fixed cutoff would be quantitatively arbitrary and not reflective of their campus roles.

Instead, the proposal is based on the qualitative distinction between faculty members who are members of the Administration, on the one hand, and faculty members who simply have administrative responsibilities, on the other hand. The proposal makes this important qualitative distinction by employing titles typically associated in higher education with the Academic Administration (i.e. President, Provost, Associate and Vice Provost, Dean, and Associate Dean) to identify our faculty members who are also members of our Administration, regardless of the fraction of their time devoted to their role in the Administration. In this way, it also recognizes that many faculty members who have administrative responsibilities (i.e. department heads, associate department heads, program directors, center directors, etc.) are not members of the Administration, regardless of the fraction of their time they devote to their administrative responsibilities.

The proposal is also based on the principle that, in addition to populating our committees with elected faculty members whose positions do not present any apparent or unnecessary complications from additional formal connections to the Administration, our faculty governance committees should include – as it always has - appropriate participation by *ex officio* members of the Administration, as well as members of the Administration and appointed representatives of the Administration (oftentimes by the President and the Provost) through its formal and carefully specified membership structure.

In this manner, the proposal will clarify a longstanding confusion in a way that is: a) simple to implement; b) based on a common understanding of the distinction between faculty and administration; c) consistent with our continuing commitment to ; and d) faithful to our strong tradition of collaboration between faculty and administration in our faculty governance processes.

Note: For discussion, only.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Governance (Prof. Heineman, Chair)

Committee on Appointments and Promotions (Prof. Martin, Prof. Weathers, Co-Chairs)

Re: Motion to provide guidelines for initiating searches for new Department Heads and for the appointments and terms of Interim Department Heads

Motion: The Committee on Governance (COG) and the Committee on Appointments and Promotions (COAP) recommends, and we move that Chapter Two, Section 5 (Roles and Responsibilities, Initial Appointments, Reviews, and Reappointments of Department Heads) be modified by adding to Subsection 5.b (Initial Appointments of Department Heads) guidelines for initiating searches for new Department Heads, and by adding Subsection 5.e (Appointments and Terms of Interim Department Heads) to provide guidelines for the appointments and the terms of Interim Department Heads, as described below.

Description of the Proposed Modifications:

(Text to be added is in red. Text to be removed is ~~struck out.~~)

Faculty Handbook:

Chapter Two: ACADEMIC APPOINTMENTS

**Section 5: ROLES AND RESPONSIBILITIES, INITIAL APPOINTMENTS, REVIEWS,
AND REAPPOINTMENTS OF DEPARTMENT HEADS**

**5. ROLES AND RESPONSIBILITIES, INITIAL APPOINTMENTS, EVALUATIONS, AND
REAPPOINTMENTS OF DEPARTMENT HEADS**

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b. Initial Appointment of Department Heads

- i. *Term of Initial Appointment:* The initial appointment for any Department Head is for a five-year period.
- ii. *Appointment Process:* When a new Department Head is to be selected from either inside or outside of WPI, the Dean will first consult with the faculty in the department concerned **to determine the best course of action in the interests of the department. A department and/or those faculty members within the department wishing to provide its/their input in a confidential and/or anonymous manner should be provided the opportunity to do so. and Accounting for this input, and in consultation with the Provost, the Dean will then initiate the search and** form a search committee according to the following procedures.

If it is known a year in advance that the current Department Head will not continue in their current role, then the search for the next Department Head will begin early in the next academic year following the year in which the Department Head vacancy first became known. If the search is unsuccessful, then an interim Department Head will be appointed according to Section 5.e below.

A search committee consists of two faculty members elected by the department, one member of the Committee on Appointments and Promotions (COAP) selected by COAP, a faculty member appointed by the Provost, and the Dean or their representative who serves as Chair of the search committee. The search committee will establish its procedures for operation consistent with the following requirements:

The search committee will solicit nominations and applications for the position, evaluate the applicants, and select at least two candidates to interview for the position (unless there is only one applicant in an internal search). As part of the interview process, the search committee will make arrangements for each of the candidates to meet with the departmental faculty. The search committee will determine the preferences of the members of the department, and weigh those heavily in arriving at its own preferences.

The Dean submits to the Provost the names of the acceptable candidates as determined by the search committee, the Dean's recommendation, the preferences and comments of the search committee, and the preferences and comments of the departmental faculty. Whereas collaboration is essential to WPI, Deans are expected to collaborate with other Deans when evaluating Department Heads for appointment in departments where collaboration across schools is significant (as defined by the Provost). The Committee on Appointments and Promotions is given copies of all documents submitted to the Provost concerning the selection.

The Provost, after consultation with the President, generally will appoint one of the acceptable candidates forwarded by the Dean as Department Head. However, if none of the candidates is acceptable to the Provost, the reasons will be discussed with the search committee and the Committee on Appointments and Promotions, and the search committee will continue the selection process.

In this manner, Department Heads are appointed by the Provost upon the recommendation of the Dean and the Committee on Appointments and Promotions and subject to approval by the President.

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d. Reappointment of Department Heads

- i. Term and Limits of Reappointment: Only one reappointment may be made, for a second term of five years and for a maximum total of ten years of service as Department Head, unless special circumstances exist.
- ii. Reappointment Process: The reappointment of a Department Head for a second term will involve the following procedure.
 - A. In the spring of the fourth year of the Department Head's first term, the Committee on Appointments and Promotions will evaluate the Department Head for reappointment. The evaluation will involve:
 - Review of all written materials obtained in the second and fourth year reviews (as described above in Section 5c).
 - Confidential interviews with all faculty members in the department;
 - An interview with the Department Head involved.
 - Collection and review of any other information that COAP believes will influence the evaluation.
 - B. The Committee on Appointments and Promotions will report its recommendation in writing concerning reappointment to the Dean before the end of D-term of the fourth year of the Department Head's first term.
 - C. The Dean will provide the Provost both their recommendations and a copy of the Committee on Appointments and Promotions report concerning evaluation and reappointment. Whereas collaboration is essential to WPI, Deans are expected to collaborate with other Deans when

evaluating Department Heads for reappointment in departments where collaboration across schools is significant (as defined by the Provost).

D. The Provost, after consultation with the President, will decide on the reappointment. The Provost will discuss their decision with the Committee on Appointments and Promotions.

e. *Appointments and Terms of Interim Department Heads*

- i. *Appointments of Interim Department Heads***: Interim Department Heads should only be appointed due to unanticipated circumstances. If, in a given academic year, due to unanticipated circumstances, it is necessary to appoint an interim Department Head, then the Dean will consult with the faculty members in the department concerned to determine the choice that is in the best interests of the department. A department and/or those faculty members within the department wishing to provide its/their input in a confidential and/or anonymous manner will be provided the opportunity to do so. The Dean will share the input from the department with the Provost and will make a recommendation concerning the interim appointment. The interim appointment will be made by the Provost in timely fashion and in the same academic year in which the vacancy occurs.
- ii. *Term Limits of Interim Department Heads***: A Department should not be led by Interim Department Head(s) for more than two consecutive years. For this reason, the search for a new Department Head will begin by no later than early in the next academic year following the year in which the Department Head vacancy first became known. If the search is not successful, then an interim appointment will be made by the Provost (with input from the department and with a recommendation from the Dean) for an additional year (even if it is beyond the second) while the search for a new Department Head is continued.

Rationale:

At WPI, the leadership role of a Department Head, serving in one - or typically two - five-year terms, is much larger than that of a rotating Department Chair (typically serving one two- or three-year term) at many other universities. For this reason, a WPI academic department with an interim Department Head, even for a single year but especially for an extended period of time, can lose its momentum, have difficulty recruiting and retaining new faculty members, and hesitate to take on challenges that have longer-term departmental implications. In addition to these disadvantages, the fact that a colleague has served in the interim role may well discourage other qualified candidates – especially internal candidates - from applying for the permanent position, especially if the search itself is internal. It is therefore essential that Department Head transitions, whether they occur due to anticipated or unanticipated circumstance, be handled smoothly, efficiently, and with a minimum of disruption to the department concerned.

In the meantime, because several of our academic departments have been led for two years by interim Department Heads, the Committee on Appointments and Promotions recently began including interim Department Heads in the two-year review process that was originally intended for Department Heads who were appointed to full five-year terms. In response, the WPI faculty approved a formal policy at the March 13, 2024 faculty meeting that extended the two-year review process to interim Department Heads, as well.

However, the general concern raised by the faculty, by the Committee on Appointments and Promotions, and by the Committee on Governance at the time was that the extension of the review process to interim Department Heads in their second year was not to be interpreted as an endorsement of the idea that interim Department Heads should serve for extended periods. For this very reason, the idea that the review of interim Department Heads should be extended beyond the second year was rejected by the faculty - with the understanding that a motion to limit the terms of interim Department Heads in a sensible manner would soon be proposed by the Committee on Governance and the Committee on Appointments and Promotions.

This proposal addresses rational and flexible limits that should be placed on the appointments and terms of interim Department Heads in two ways:

- First, the proposal focuses on the *easily anticipated circumstances* in which it is known a year in advance that the current Department Head will not continue in their current role. In these cases, the proposal requires that a timely search for the next permanent Department Head begin early in the next academic year following the year in which the Department Head vacancy first became known. In this manner, if the search is successful, *this schedule eliminates the need to appoint an interim Department Head entirely.*
- Second, the motion focuses on *unanticipated circumstances* in which it is necessary to appoint an interim Department Head. In these cases, the proposal ensures that the faculty members within the department have formal input into the decision about the appointment, ensures that the Dean of the appropriate school plays a prominent role in collaborating with and making a recommendation to the Provost, and relies on the Provost to make the formal interim appointment. Moreover, *the proposal establishes a normal upper limit of two years before a permanent Department Head is appointed,* which again requires that a timely search be initiated – in this case by no later than the early in the academic year following the year in which the unanticipated Department Head vacancy first became known.

Finally, the proposal also clarifies the variety of opportunities that departmental faculty members shall be provided to give their input concerning the best interests of the department before a search for a new Department Head is undertaken.

Note: For discussion, only.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Financial and Administrative Policy (Prof. Walker, Chair)
Fringe Benefits Committee (Prof. Dempski, Chair)
Committee on Governance (Prof. Heineman, Chair)

Re: Motion to modify the membership on FBC and the representation in FBC deliberations

Motion: The Committee on Financial and Administration Policy (FAP), the Fringe Benefits Committee (FBC), and the Committee on Governance (COG) recommend, and we move that the WPI faculty membership on the FBC and staff representation in FBC deliberations (as described in Bylaw Three, Section VIII.a of the Faculty Handbook) be modified, as described below.

Description of the Proposed Modifications:

Overview:

This proposal would modify the faculty membership on the Fringe Benefits Committee (FBC) and the staff representation in Fringe Benefits Committee (FBC) deliberations in order to enhance the representation and influence of staff members in decisions that affect their benefits.

As the FBC currently operates, the FBC consists of seven faculty members who invite five WPI staff members join FBC deliberations and to vote on matters related to benefits that are of equal concern to the WPI faculty and staff. The five members of the WPI staff are chosen by the V.P. of Talent and Inclusion to serve three-year staggered terms.

The proposed modifications would reset the faculty membership on the FBC and the staff representation in FBC deliberations as follows:

1. Faculty Representation:

- Decrease the number of faculty representatives from seven to five to equal the number of invited staff representatives. In addition, the committee has grown too large with 12 members and this decrease will help this committee to run more smoothly.

2. Staff Appointments:

- The five staff members will be appointed by the Staff Council with input from WPI Talent and Inclusion. The staff members are chosen to proportionally represent exempt and non-exempt employees and to promote a representative selection of eligible staff members across university divisions.

3. Vice-Chair Appointment:

- Introduce a vice-chair role for the staff to ensure shared leadership on matters related to benefits that are of equal concern to the WPI faculty and staff. The Vice-Chair will serve as one of the five staff members described in item 2 above and would be appointed by the Staff Council.

4. Term of Service for Staff:

- The Vice-Chair will be appointed from among the current Staff Council members to a one-year (renewable) term, up to two consecutive years.

- The remaining four - staff members will serve three-year staggered (renewable) terms and do not have to be members of the Staff Council to serve. This arrangement ensures continuity and experienced participation over time.

Proposed Changes to the Faculty Handbook:

Bylaw Three, Section VIII.a

The Fringe Benefits Committee (FBC)

(with text to be added in red, and text to be deleted ~~struckthrough~~)

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Membership and Appointment Procedures:

The FBC consists of a Chair to be selected for one-year renewable terms from FAP from among its faculty members, ~~two~~ **one**-tenured or tenure-track and one secured nontenure-track faculty members selected by the Committee on Governance (COG), and ~~two~~ **one additional** tenured or tenure-track and one secured nontenure-track faculty members selected by FAP. Faculty members of the FBC (other than the Chair) will serve three-year staggered terms. Current COG or FAP members appointed to the FBC who have not completed three years of service on FBC when their COG or FAP terms expire will continue on FBC **to complete their FBC terms.**

Although formally the FBC is constituted as above, operationally it invites five members of the WPI staff to join its deliberations and to vote on matters related to benefits that are of equal concern to the WPI faculty and staff. The five members of the WPI staff are chosen by the **Staff Council with input from WPI V.P. of Talent and Inclusion. These staff members are comprised of one Vice-Chair chosen by the Staff Council from among its members to serve a one-year (renewable) term (up to a maximum of two years) and four staff members to serve three-year staggered (renewable) terms. The staff members are chosen to proportionally represent exempt and non-exempt employees and to promote a representative selection of eligible staff members across university divisions.**

Either the V.P. of Talent and Inclusion or the Director of Benefits and Wellness serves as the liaison between the FBC and the Division of Talent and Inclusion. The liaison provides information requested by the FBC to conduct its deliberations in an informed manner. Neither the V.P. of Talent and Inclusion nor the Director of Benefits and Wellness should serve as one of the five invited voting WPI staff members.

Rationale:

These proposed modifications will balance faculty and staff representation in the deliberations of the FBC on matters related to benefits that are of equal concern to both constituencies. Equalizing participation in these deliberations corrects an imbalance that was inadvertently created when the number of faculty members was increased to include two additional (nontenure-track) faculty members without increasing the number of staff members at the same time.

In addition, the proposed modifications include a process by which the staff members are selected by the Staff Council with input from the Division of Talent and Inclusion that will ensure that decisions and recommendations on these matters properly reflect the comprehensive needs and perspectives of WPI's diverse staff community.

Specifically, the modifications will provide the following three benefits:

- *Balanced Leadership*: A staff vice-chair ensures equitable leadership on matters related to benefits that are of equal concern to the WPI faculty and staff, aligning with WPI's commitment to shared governance.
- *Representative Inclusion*: The diverse composition of staff members ensures that varied perspectives and interests are considered in the FBC's deliberations concerning relevant benefits.
- *Continuity and Experience*: Staggered three-year terms for staff members foster sustained involvement and knowledge accumulation, contributing to more informed and stable decision-making.

Finally, the proposed modifications set an example of a collaborative and balanced approach to decision-making at WPI, and demonstrate how WPI's Faculty Governance (in this case, through FBC, FAP, and COG) and WPI's Staff Council continue to work well together.

Implementation:

- The Staff Council will proceed with the selection process for the Vice-Chair and the four staff members, integrating them into the proposed FBC framework, effective July 1, 2024. The selections of staff members will include the designation of the term lengths for each member (up to three years) to facilitate a proper staggering of terms in future years.
- The three faculty members whose terms on FBC end on June 30, 2024 (i.e. the current Chair appointed by FAP, one current TTT faculty member appointed by FAP, and one current TTT faculty member appointed by COG) will rotate off the FBC, as scheduled. This will leave one TTT and one secured NTT faculty member selected by COG (with terms that end in 2026 and 2025, respectively), and one TTT and one secured NTT faculty member selected by FAP (with terms that end in 2025 and 2026, respectively).
 - For 2024-25: FAP will appoint one of its members to serve as Chair of FBC for that academic year.
 - In 2025-26: FAP will appoint an TTT faculty member to serve a three-year term from 2025-2028, and COG will appoint an NTT faculty member to serve a two-year term from 2025-2027 – as included in the table below.
 - In all subsequent years, FAP will appoint a Chair of FBC for one year, and COG and/or FAP will make their three-year TTT or NTT appointments as needed to maintain the staggered three-year term rotation – as summarized in the table below.

Final Year of Term - for FBC Faculty Members
(by Academic Year and Membership Status)

	AY 24-25	AY 25-26	AY 26-27	AY 27-28	AY 28-29
COG Appt: TTT	2026	2026	2029	2029	2029
COG Appt: NTT	2025	2027	2027	2030	2030
FAP Appt: TTT	2025	2028	2028	2028	2031
FAP Appt: NTT	2026	2026	2029	2029	2029

Note: New appointments are denoted in **bold red**.

Appendix
Consent Agenda Motions

(see next page)

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to add AE 2210 Introduction to Thermal Engineering

Motion: On behalf of the Aerospace Engineering Department, the Committee on Academic Operation recommends, and I move that AE 2210 Introduction to Thermal Engineering, as described below, be added.

Proposed Course Description:

AE 2210: Introduction to Thermal Engineering (1/3 units; Cat. I)

Thermal engineering encompasses a broad range of topics that include the behavior of matter and energy and their interaction as part of a system with the surrounding environment. This course covers topics from the fields of thermodynamics and heat transfer. You will learn how to identify systems and to use thermodynamic analysis to describe the behavior of the system in terms of properties and processes. Heat transfer between systems is a fundamental part of many engineering disciplines. While thermodynamics provides the foundation for understanding the energy distribution in a system in equilibrium, heat transfer provides a means for determining the rates of energy transfer under a variety of conditions. Understanding how to apply these concepts is a powerful tool for the engineer, enabling the evaluation of material states (phases) under different conditions and the maximum efficiency achievable with various power cycles. After completing this course, you should be able to define and describe properties and processes used in thermodynamic analysis and the governing laws. You should also be able to define and describe the phenomena of conduction, convection, and radiation and apply the heat diffusion equation to determine the temperature distribution in objects subject to different thermal boundary conditions. Finally, you should be able to calculate the heat transfer rates for objects subject to different (and combined) modes of heat transfer.

Recommended background: basic physics, (PH 1110, PH 1111) elementary differential and integral calculus (MA 1021, MA 1022), ordinary differential equations (MA2051) or equivalent.

Anticipated Instructors: Professors: John Blandino; Zach Taillefer; Jagan Jayachandran; David Olinger; Nikos Gatsonis.

Rationale:

The proposed thermal sciences course combines concepts from thermodynamics and heat transfer at an introductory level. The course includes the foundational and applications area from each topic most relevant to students pursuing the AE Major, consistent with the requirements of ABET accreditation.

The AE major has been using ES 3001 and ES 3003 as courses to satisfy the “2/3 units in propulsion and Energy, with topics in thermodynamics and heat transfer” requirement for AE majors. This AE requirement was introduced for the 2022-23 AY. Heat transfer and thermodynamics are not explicitly referenced as topics in the ABET requirements for AE programs, but the material is useful background for coverage of propulsion, which is a required ABET topic. Our annual course and program reviews have found that the coverage offered in

these two ES courses is excessive for the needs of AE majors. The upcoming revised ABET requirements for aerospace engineering programs will further de-emphasize the role of such basic topics in favor of new modern aerospace engineering topics. As a result, the AE program has started revising its aerodynamics and propulsion curriculum, and the proposed thermal science course is a step in that direction. The coverage in the proposed course will offer the necessary concepts for AE majors to pursue airbreathing and rocket propulsion, as required by ABET. The concepts for the proposed course have been carefully chosen by AE faculty who have offered ES 3001, ES 3003 and the propulsion courses.

Impact on Distribution Requirements and Other Courses:

- Beginning with the 2024-25 Academic Year, AE 2210 will be used by AE Majors to satisfy the distribution requirement of 1/3 Unit in Propulsion and Energy.
- Current AE Majors may count this new course towards their AE distribution requirements in lieu of ES 3001 or ES 3003, but not both.
- Students from other majors may take this course as a free elective.

Resources Needed: No new resources are needed to teach the proposed course.

- AE has been offering a section of ES 3001 and ES 3003. For the 2024-25 academic year and in anticipation of AE offering this new course we did not post a ES 3003 section for D term. Therefore, there is no net gain or loss by offering the proposed course.
- There are no special classroom requirements, and the course will be delivered in 2024-25 by Professor Blandino who has taught both ES 3001, ES 3003 as well as our propulsion courses.

Contact: Prof. N. Gatsonis, AED Head

Implementation Date: Implementation date for this action is the 2024-2025 Academic Year.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Academic Operations (Prof. Van Dessel, Chair)

Re: Motion to add AE 3010 Experimentation and Data Science with Aerospace Engineering Applications

Motion: On behalf of the Aerospace Engineering Department, the Committee on Academic Operation recommends, and I move that AE3010 Experimentation and Data Science with Aerospace Engineering Applications as described below, be added.

Proposed Course Description:

AE 3010 Experimentation and Data Science with Aerospace Engineering Applications

(1/3 units; Cat. I)

In this course, students are introduced to experimental and data analysis techniques in modern aerospace engineering measurement methods and experimentation, based on electronic instrumentation and computer-based data acquisition systems. Students are also introduced in principles of instrumentation, with laboratory periods that provide an opportunity to use modern devices in actual experiments. Lecture topics include review of experimentation and measurement fundamentals, discussion of standards, experiment planning and design, data acquisition, analysis of experimental data, error propagation, uncertainty estimation, and report writing. Laboratory experiments include flow visualization and property measurement, force/torque/strain measurement, motion/vibration measurement, control systems, and temperature measurement. Laboratory experiments incorporate data science methods such as data decomposition, regression, filtering, distributions, optimization, estimation, prediction.

Recommended background: basic physics, (PH 1110, PH 1111) elementary differential and integral calculus (MA 1021, MA 1022), ordinary differential equations (MA2051) or equivalent.

Anticipated Instructors: Professors Zachary Taillefer, David Olinger, Jagan Jayachandran, John Blandino, Nikhil Karanjaokar.

Rationale:

The purpose of this course is for AE majors to fulfil their engineering experimentation requirement. Currently, Aerospace Engineering students are required to take ME3901/2 to fulfil this requirement. The proposed course will better suit AE majors as it will include applications relevant to the aerospace engineering discipline. The proposed course will also better align with ABET accreditation requirements specific to the Aerospace Engineering programs.

Resources Needed: The course will be taught by Prof. Zachary Taillefer in 2024-25, a current faculty member in the AE Department. The course will be taught in an existing AE facility (HL 216). The course requires the purchase of new equipment which are in the process of been acquired with an approved budget.

Impact on Distribution Requirements and Other Courses: There is no impact on distribution requirement with the introduction of AE 3010.

- Beginning with the 2024-25 AY, AE 3010 will be added as a recommended course that can be used by AE Majors to satisfy the distribution requirement of 1/3 Unit in Experimentation.

The currently recommended courses ME 3901 and ME3902 will still be available to AE Majors.

- Students from other majors may take this course as a free elective.

Contact: Prof. N. Gatsonis, AED Head

Implementation Date: Implementation date for this action is the 2024-2025 Academic year.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to modify the distribution requirements for the B.S. degree in Aerospace Engineering

Motion: On behalf of the Aerospace Engineering Department, the Committee on Academic Operations recommends and I move that the distribution requirements for the B.S. degree in Aerospace Engineering be modified, as described below.

Description of the Proposed Modifications:

CURRENT PROGRAM DISTRIBUTION REQUIREMENTS FOR THE AEROSPACE ENGINEERING MAJOR

(As they appear on pages 477-482 in the 2023-24 undergraduate catalog)

Mathematics and Basic Sciences (Minimum 10/3 Units)

Mathematics (Minimum 6/3 Units)

Must include a minimum of 6/3 units of mathematics (prefix MA) with topics in: differential, integral, vector, multivariable calculus, differential equations, and linear algebra.

Recommended Courses

Item #	Title	Units
MA 1021	Calculus I	1/3
MA 1022	Calculus II	1/3
MA 1023	Calculus III	1/3
MA 1024	Calculus IV	1/3
MA 2051	Ordinary Differential Equations	1/3
MA 2071	Matrices and Linear Algebra I	1/3

Physics (Minimum 2/3 Units)

Must include a minimum of 2/3 units in physics (prefix PH) with topics in mechanics, electricity and magnetism.

Recommended Courses

Item #	Title	Units
PH 1110	General Physics—Mechanics	1/3
PH 1111	Principles of Physics—Mechanics	1/3
PH 1120	General Physics—Electricity and Magnetism	1/3
PH 1121	Principles of Physics—Electricity and Magnetism	1/3

Space Environments (Minimum 1/3 Units)

Must include 1/3 units in space environments (fulfilled by PH/AE 2550 Atmospheric and Space Environments as a Math and Basic Science course or other equivalent course with approval of the AE Program Undergraduate Committee)

Recommended Courses

Item #	Title	Units
PH 2550/AE 2550	Atmospheric and Space Environments	1/3

Chemistry (Minimum 1/3 Units)

Must include 1/3 unit in chemistry (prefix CH).

Recommended Courses

Item #	Title	Units
CH 1010	Chemical Properties, Bonding, and Forces	1/3
CH 1020	Chemical Reactions	1/3

Engineering Topics (Minimum 20/3 Units)

Must include 20/3 units of Engineering Topics, distributed as follows:

Core Aerospace Engineering (Minimum 11/3 Units)

Fluid Dynamics (Minimum 2/3 Units)

2/3 units of Fluid Dynamics, with topics in: incompressible fluid dynamics; compressible fluid dynamics.

Recommended Courses

Item #	Title	Units
AE 2110	Introduction to Incompressible Fluid Dynamics	1/3
AE 3110	Fundamentals of Compressible Fluid Dynamics	1/3

Propulsion and Energy (Minimum 2/3 Units)

2/3 units in Propulsion and Energy, with topics in thermodynamics; heat transfer.

Recommended Courses

Item #	Title	Units
ES 3001	Introduction to Thermodynamics	1/3
ES 3003	Heat Transfer	1/3

Materials and Structures (Minimum 4/3 Units)

4/3 units in Materials and Structures with topics in: materials; aerospace structures; structural dynamics.

Recommended Courses

Item #	Title	Units
AE 2410	Introduction to Aerospace Structures	1/3
AE 3420	Fundamentals of Aerospace Structures	1/3
AE 4410	Fundamentals of Structural Dynamics	1/3
ES 2001	Introduction to Materials Science	1/3

Flight Dynamics and Controls (Minimum 2/3 Units)

2/3 units in Flight Dynamics and Controls, with topics in: dynamics; controls; aircraft dynamics and control.

Recommended Courses

Item #	Title	Units
AE 2310	Introduction to Aerospace Control Systems	1/3
ES 2503	Introduction to Dynamic Systems	1/3

General Engineering (Minimum 1/3 Units)
 1/3 units in General Engineering, with topics in: Experimentation.

Recommended Courses		Units
Item #	Title	
ME 3901	Engineering Experimentation	1/3
ME 3902	Project-Based Engineering Experimentation	1/3

Aeronautics *OR* Astronautics Track (Minimum 9/3 Units)

Aeronautics Track

Fluid Dynamics (Minimum 1/3 Units)
 1/3 unit in Fluid Dynamics with topics in: aerodynamics.

Recommended Courses		Units
Item #	Title	
AE 3120	Fundamentals of Aerodynamics	1/3

Propulsion and Energy (Minimum 1/3 Units)
 1/3 unit in Propulsion and Energy, with topics in: air breathing propulsion.

Recommended Courses		Units
Item #	Title	
AE 4210	Fundamentals of Air-Breathing Propulsion	1/3

Materials and Structures (Minimum 1/3 Units)
 1/3 units in Materials and Structures

Flight Dynamics and Controls (Minimum 1/3 Units)
 1/3 unit in Flight Dynamics and Controls.

Recommended Courses		Units
Item #	Title	
AE 4310	Fundamentals of Aircraft Dynamics and Control	1/3

Aerospace Design (Minimum 4/3 Units)
 4/3 units in Aerospace Design.

Recommended Courses		Units
Item #	Title	
AE 4510	Aircraft Design	1/3

Astronautics Elective (Minimum 1/3 Units)
 1/3 unit in Astronautics Elective, with topics in: orbital mechanics or rocket propulsion or spacecraft dynamics and control

Recommended Courses		Units
Item #	Title	
AE 2320	Introduction to Orbital Mechanics	1/3
AE 3310	Fundamentals of Navigation and Communication	1/3
AE 4220	Fundamentals of Rocket Propulsion	1/3
AE 4320	Fundamentals of Spacecraft Dynamics and Control	1/3

Astronautics Track

Propulsion and Energy (Minimum 1/3 Units)

1/3 unit in Propulsion and Energy, with topics in: rocket propulsion.

Recommended Courses

Item #	Title	Units
AE 4220	Fundamentals of Rocket Propulsion	1/3

Dynamics and Control (Minimum 3/3 Units)

3/3 units in Dynamics and Control, with topics in: orbital mechanics; spacecraft dynamics and control; navigation and communication.

Recommended Courses

Item #	Title	Units
AE 2320	Introduction to Orbital Mechanics	1/3
AE 3310	Fundamentals of Navigation and Communication	1/3
AE 4320	Fundamentals of Spacecraft Dynamics and Control	1/3

Aerospace Design (Minimum 4/3 Units)

4/3 units in Aerospace Design.

Recommended Courses

Item #	Title	Units
AE 4520	Spacecraft and Mission Design	1/3

Aeronautics Elective (Minimum 1/3 Units)

1/3 unit in Aeronautics Elective, with topics in: aerodynamics or air breathing propulsion or composite materials.

Recommended Courses

Item #	Title	Units
AE 3120	Fundamentals of Aerodynamics	1/3
AE 4210	Fundamentals of Air-Breathing Propulsion	1/3

PROPOSED PROGRAM DISTRIBUTION REQUIREMENTS FOR THE AEROSPACE ENGINEERING MAJOR

(with deletions shown with ~~striketrough~~ and additions shown in **red**):

Mathematics and Basic Sciences (Minimum 10/3 Units)

Mathematics (Minimum ~~7~~**6**/3 Units)

Must include a minimum of 6/3 units of mathematics (prefix MA) with topics in: differential, integral, vector, multivariable calculus, differential equations, ~~and~~ linear algebra, **and applied statistics.**

Recommended Courses

Item #	Title	Units
MA 1021	Calculus I	1/3
MA 1022	Calculus II	1/3
MA 1023	Calculus III	1/3
MA 1024	Calculus IV	1/3
MA 2051	Ordinary Differential Equations	1/3
MA 2071	Matrices and Linear Algebra I	1/3
MA 2611	Applied Statistics I	1/3

Physics (Minimum 2/3 Units)

Must include a minimum of 2/3 units in physics (prefix PH) with topics in: ~~mechanics;~~ electricity and magnetism.

Recommended Courses

Item #	Title	Units
PH 1110	General Physics—Mechanics	1/3
PH 1111	Principles of Physics—Mechanics	1/3
PH 1120	General Physics—Electricity and Magnetism	1/3
PH 1121	Principles of Physics—Electricity and Magnetism	1/3

~~Space Environments (Minimum 1/3 Units)~~

~~Must include 1/3 units in space environments (fulfilled by PH/AE 2550 Atmospheric and Space Environments as a Math and Basic Science course or other equivalent course with approval of the AE Program Undergraduate Committee)~~

~~Recommended Courses~~

Item #	Title	Units
PH 2550/AE 2550	Atmospheric and Space Environments	1/3

Chemistry (Minimum 1/3 Units)

Must include 1/3 unit in chemistry (prefix CH).

Recommended Courses

Item #	Title	Units
CH 1010	Chemical Properties, Bonding, and Forces	1/3
CH 1020	Chemical Reactions	1/3

Engineering Topics (Minimum 20/3 Units)

Must include 20/3 units of Engineering Topics, distributed as follows:

Core Aerospace Engineering (Minimum 11/3 Units)

Fluid Dynamics (Minimum 2/3 Units)

2/3 units of Fluid Dynamics, with topics in: incompressible fluid dynamics; compressible fluid dynamics.

Recommended Courses

Item	# Title	Units
AE 2110	Introduction to Incompressible Fluid Dynamics	1/3
AE 3110	Fundamentals of Compressible Fluid Dynamics	1/3

Propulsion and Energy (Minimum 12/3 Units)

12/3 units in Propulsion and Energy, with topics in **thermal engineering** thermodynamics; heat transfer.

Recommended Courses

Item	# Title	Units
AE 2210	Introduction to Thermal Engineering	1/3
ES 3001	Introduction to Thermodynamics	1/3
ES 3003	Heat Transfer	1/3

Materials and Structures (Minimum 4/3 Units)

4/3 units in Materials and Structures with topics in: materials; aerospace structures; structural dynamics.

Recommended Courses

Item	# Title	Units
AE 2410	Introduction to Aerospace Structures	1/3
AE 3420	Fundamentals of Aerospace Structures	1/3
AE 4410	Fundamentals of Structural Dynamics	1/3
ES 2001	Introduction to Materials Science	1/3

Flight Dynamics and Controls (Minimum 2/3 Units)

2/3 units in Flight Dynamics and Controls, with topics in: dynamics; controls; aircraft dynamics and control.

Recommended Courses

Item #	Title	Units
AE 2310	Introduction to Aerospace Control Systems	1/3
ES 2503	Introduction to Dynamic Systems	1/3

General Engineering (Minimum 24/3 Units)

1/3 units in General Engineering, with topics in: experimentation.

Recommended Courses

Item #	Title	Units
AE 3010	Experimentation and Data Science with Aerospace Engineering Applications	1/3
ME 3901	Engineering Experimentation	1/3
ME 3902	Project-Based Engineering Experimentation	1/3

1/3 units in General Engineering, with topics in: space environments

Recommended Courses

Item #	Title	Units
AE 2550	Atmospheric and Space Environments	1/3

Aeronautics *OR* Astronautics Track (Minimum 9/3 Units)

Aeronautics Track

Fluid Dynamics (Minimum 1/3 Units)

1/3 unit in Fluid Dynamics with topics in: aerodynamics.

Recommended Courses

Item #	Title	Units
AE 3120	Fundamentals of Aerodynamics	1/3

Propulsion and Energy (Minimum 1/3 Units)

1/3 unit in Propulsion and Energy, with topics in: air breathing propulsion.

Recommended Courses

Item #	Title	Units
AE 4210	Fundamentals of Air-Breathing Propulsion	1/3

Materials and Structures (Minimum 1/3 Units)

1/3 units in Materials and Structures **with topics in: composites**

Recommended Courses

Item #	Title	Units
AE 3430	Fundamentals of Composite Materials	1/3

Flight Dynamics and Controls (Minimum 1/3 Units)

1/3 unit in Flight Dynamics and Controls **with topics in: aircraft dynamics and control.**

Recommended Courses

Item #	Title	Units
AE 4310	Fundamentals of Aircraft Dynamics and Control	1/3

Aerospace Design (Minimum 4/3 Units)

4/3 units in Aerospace Design **with topics in: 1/3 Units in aircraft design; and 3/3 Units MQP.**

Recommended Courses

Item #	Title	Units
AE 4510	Aircraft Design	1/3

Astronautics Elective (Minimum 1/3 Units)

1/3 unit in Astronautics Elective, with topics in: orbital mechanics **or navigation and communications** or rocket propulsion or spacecraft dynamics and control.

Recommended Courses

Item #	Title	Units
AE 2320	Introduction to Orbital Mechanics	1/3
AE 3310	Fundamentals of Navigation and Communication	1/3
AE 4220	Fundamentals of Rocket Propulsion	1/3
AE 4320	Fundamentals of Spacecraft Dynamics and Control	1/3

Astronautics Track

Propulsion and Energy (Minimum 1/3 Units)

1/3 unit in Propulsion and Energy, with topics in: rocket propulsion.

Recommended Courses

Item #	Title	Units
AE 4220	Fundamentals of Rocket Propulsion	1/3

Dynamics and Control (Minimum 3/3 Units)

3/3 units in Dynamics and Control, with topics in: orbital mechanics; spacecraft dynamics and control; navigation and communication.

Recommended Courses

Item #	Title	Units
AE 2320	Introduction to Orbital Mechanics	1/3
AE 3310	Fundamentals of Navigation and Communication	1/3
AE 4320	Fundamentals of Spacecraft Dynamics and Control	1/3

Aerospace Design (Minimum 4/3 Units)

4/3 units in Aerospace Design with topics in: 1/3 Units spacecraft and mission design; and 3/3 Units MQP.

Recommended Courses

Item #	Title	Units
AE 4520	Spacecraft and Mission Design	1/3

Aeronautics Elective (Minimum 1/3 Units)

1/3 unit in Aeronautics Elective, with topics in: aerodynamics or air breathing propulsion or composite materials or aircraft dynamics and control.

Recommended Courses

Item #	Title	Units
AE 3120	Fundamentals of Aerodynamics	1/3
AE 3430	Fundamentals of Composite Materials	1/3
AE 4210	Fundamentals of Air-Breathing Propulsion	1/3
AE 4310	Fundamentals of Aircraft Dynamics and Control	1/3

Note: Great Problem Seminar (GPS) courses can only be used to fulfill the HUA, SSPS or the Free Elective requirement.

Rationale:

The proposed modifications are part of our continuing improvement process and are closely tied to ABET requirements.

The addition of 1/3 units in “applied statistics” under the Mathematics and Basis Science requirement reflects current AE program needs. Our annual program reviews have shown that applied statistics is a topic appearing in several of our core and elective courses. The recommended course that can be used for this requirement is MA 2671 Applied Statistics I.

“Space Environments” is a required engineering topic by ABET. The removal of “1/3 Units in Space Environments” from the Mathematics and Basis Science requirement and its incorporation under the “11/3 Units in Core Aerospace Engineering” requirement by all AE majors addresses this ABET requirement. The existing cross listed AE/PH 2550 Atmospheric and Space Environments course with the AE prefix remains the recommend course. The AE program in the future will further revise the course content or offer a new course to address the specific coverage expected by ABET as new program criteria emerge.

The above modifications do not impact the current requirement for “10/3 Units in Math and Basic Science”, because we are removing the “1/3 unit in Space Environments” and adding “1/3 unit in Statistics.”

The current “2/3 units in Propulsion and Energy, with topics in thermodynamics and heat transfer” was introduced for the 2022-23 AY as part of the “11/3 Units in Core Aerospace Engineering”. Heat transfer and thermodynamics are not explicitly referenced as topics in the ABET requirements for AE programs, but the material is useful background for coverage of propulsion, which is a required ABET topic. Our annual course and program reviews have found that the coverage offered in these two ES courses is excessive for the needs of AE majors. The upcoming revised ABET requirements for aerospace engineering programs will further de-emphasize the role of such basic topics in favor of new modern aerospace engineering topics. As a result, the AE program has started revising its aerodynamics and propulsion curriculum, and the proposed reduction to 1/3 “thermal engineering” requirement addresses this issue. AE is offering in 2024-25 D term a new course “Introduction to Thermal Engineering” which is a course that can be used to satisfy the requirement.

The modifications does not impact the current requirement for “11/3 Units in Core Aerospace Engineering”, because we are reducing the “2/3 unit in Propulsion and Energy” to “1/3 Unit” and adding “1/3 unit in Space Environments.”

The remaining modifications in red are editorial in nature and some fix omissions that occurred with the transfer of the original format of the degree requirements into the 2022-23 undergraduate catalog.

Impacts: Current AE majors will be allowed to follow the new degree requirements.

Resources Needed:There are no new resources needed to implement these revisions.

Implementation Date: The implementation date for this action is the 2024-2025. Academic year. Incoming students must follow the new distribution requirements described in this motion. Current students can choose to follow either the current distribution requirements or the new distribution requirements.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to modify the distribution requirements for the Mechanical Engineering major

Motion: On behalf of the Mechanical and Materials Engineering Department, the Committee on Academic Operation recommends and I move, that the distribution requirements for the Mechanical Engineering major be modified, as described below.

Description of the Proposed Modifications:

Current Distribution Requirements in Mechanical Engineering:

Currently ME majors take 4/3 Unit of engineering electives. The current requirement states, “Elective courses from engineering disciplines may be selected at the 2000 or higher level. They may also include ES and ME courses at the 1000 level.”

Proposed Distribution Requirements in Mechanical Engineering:

The proposed change would be to require 2/3 Unit of engineering electives to be within the ME2000 or 3000 level. The new language would be, “Elective courses from engineering disciplines may be selected at the 2000 or higher level. They may also include ES and ME courses at the 1000 level. **2/3 Unit of elective credits must be selected from ME2000 or ME3000 level courses or ES3011 Control Engineering 1 or ES 3323 Advanced Computer Aided Design.**”

Changes Placed in Undergraduate Catalog:

MECHANICAL ENGINEERING PROGRAM CHART												
STUDENTS EARNING A B.S. DEGREE IN MECHANICAL ENGINEERING MUST COMPLETE 15 UNITS OF STUDY, DISTRIBUTED AS FOLLOWS:												
4 UNITS OF NON-TECHNICAL ACTIVITIES	2 UNITS HUMANITIES AND ARTS	See WPI Requirements										
	1 UNIT INTERACTIVE QUALIFYING (IQP) PROJECT	See WPI Requirements										
	2/3 UNIT SOCIAL SCIENCE	See WPI Requirements										
	1/3 UNIT PHYSICAL EDUCATION	See WPI Requirements										
1 UNIT FREE ELECTIVE	1 UNIT FREE ELECTIVE	See Catalog										
3 2/3 UNITS OF MATHEMATICS (MA) AND BASIC SCIENCE (BB, CH, GE 2341, PH)	2 Units Differential & Integral Calculus, Ordinary Differential Equations, and Linear Algebra	<table border="1"> <tr> <th colspan="2">MATHEMATICS</th> </tr> <tr> <td>MA 1021</td> <td>MA 1023</td> </tr> <tr> <td>MA 1022</td> <td>MA 1024</td> </tr> <tr> <td>MA 2051</td> <td>MA 2071</td> </tr> </table>			MATHEMATICS		MA 1021	MA 1023	MA 1022	MA 1024	MA 2051	MA 2071
	MATHEMATICS											
MA 1021	MA 1023											
MA 1022	MA 1024											
MA 2051	MA 2071											
2/3 Units Student Selected Courses from the General Category of Mathematics and/or Basic Science	3/3 Units One Chemistry and Two Physics, OR One Physics and Two Chemistry	<table border="1"> <tr> <th colspan="2">SCIENCE</th> </tr> <tr> <td>CH 1010</td> <td>CH 1020</td> </tr> <tr> <td>PH 1110</td> <td>PH 1120</td> </tr> </table>			SCIENCE		CH 1010	CH 1020	PH 1110	PH 1120		
SCIENCE												
CH 1010	CH 1020											
PH 1110	PH 1120											
6 1/3 UNITS OF MECHANICAL ENGINEERING												
4/3 units required	4/3 units required	4/3 units required	1 unit required	4/3 units required								
MECHANICAL SYSTEMS	THERMAL SYSTEMS	OTHER COURSES	MAJOR QUALIFYING PROJECT (MQP)	ELECTIVES								
ES 2501 ES 2502 ES 2503 One of: ME 4320 ME 4322 ME 4323 ME 4324	ES 3001 ² ES 3004 ES 3003 One of: ME 4422 ME4429	ES 2001 ECE 2010 ³ ME 3901/ME 3902 Programming (ME 2313, ME 4512, BME 1004, CS 1101, or CS 1004)		Engineering (Note 1)								

Note 1: Elective courses from engineering disciplines may be selected at the 2000 or higher level. They may also include ES and ME courses at the 1000 level. **2/3 Unit of elective credits must be selected from ME2000 or ME3000 level courses or ES3011 Control Engineering 1 or ES 3323 Advanced Computer Aided Design.**

Note 2: ES 3001 may be replaced by CH 3510 or PH Thermodynamics. If Ch or PH is used to cover thermodynamics, this course counts as a science; another engineering elective is then required.

Note 3: ECE 2010 or any ECE course other than ECE 1799.

Rationale:

The need for this new program requirement arises from the need to provide students a greater technical depth within the Mechanical Engineering discipline. Under the current program requirements, students experience significant breadth within the engineering field, however, many students are not prepared for their system design and integration courses and their MQPs due to a lack of technical depth and experience within their area of interest within mechanical engineering. The advantages include improved technical skills and integration of those skills into later courses and MQPs.

Impacts on Students: The change will impact future students by improving their technical depth within Mechanical Engineering. Students will be better prepared for the technical rigor of their MQPs and ME 4000 level courses. Students will still have two Engineering Electives from any engineering field along with these two Engineering Electives from ME 2000, 3000 or the specified ES courses. This change may have implications for students completing the BS/MS program or a double major plan of study.

Implementation Date: The change is expected to be implemented starting from A-term 2024 with the class of 2028.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to add WPE 1237 Club Sport – Outing Club: Climbing

Motion: On behalf of the Physical Education, Recreation and Athletics Department, the Committee on Academic Operation recommends and I move that WPE 1237 Club Sport – Outing Club: Climbing as described below, be added.

Proposed Course Description:

WPE 1237: Club Sport – Outing Club: Climbing (*1/12 unit; Cat. I*)

(This is the generic listing for all current club sports) Club Sports are activities in various sports and wellness that are organized and recognized by SGA as Class II organizations and open to any undergraduate student. Students who are properly registered in advance for the club activity in their interest area (more information regarding Club Sports can be found at wpi.edu/+techsync) and meet the established criteria for participation by the club as well as by PERA department policy, may be eligible for WPE course credit. Practice and/or competition times vary but are generally in the evenings and weekends. Participating students may incur additional fees for equipment, travel, and/or uniforms.

Anticipated Instructor: To offer the course for academic credit for the club activity, the Physical Education, Recreation and Athletics Department will hire a coach (non-student) for each club sport. Ann McCarron, WPI Associate Athletic Director, oversees the Club Sport function including the hiring of qualified coaches as well as the grading.

Rationale:

Club Sports: Outing Club: Climbing is a newer club sport on campus and has proven sustainable enrollment, engagement and active participation over the last few years. This club has Coaches (non-WPI Students) who track participation and manage the activities. Adding this to our course offerings expands our Club Sport offerings.

Impact on Distribution Requirements and Other Courses: As an elective course to fulfill the WPE graduation requirement, adding this proposed course will provide students with additional opportunities for fulfilling the WPE degree requirements. This class is unique in its offering so there should be no impact on other courses.

Resources Needed: No other resources are needed as the funding is provided by SGA.

Implementation Date: Implementation date for this action is the 2024-2025 Academic year.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Academic Operations (Prof. Van Dessel, Chair)

Re: Motion to add WPE 1238 Club Sport – Rangeela: Bollywood Bhangra Fusion

Motion: On behalf of the Physical Education, Recreation and Athletics Department, the Committee on Academic Operation recommends and I move that WPE1238 Club Sport – Rangeela: Bollywood Bhangra Fusion, as described below, be added.

Proposed Course Description:

WPE 1238 Club Sport – Rangeela: Bollywood Bhangra Fusion (*1/12 unit; Cat. I*)

(This is the generic listing for all current club sports) Club Sports are activities in various sports and wellness that are organized and recognized by SGA as Class II organizations and open to any undergraduate student. Students who are properly registered in advance for the club activity in their interest area (more information regarding Club Sports can be found at wpi.edu/+techsync) and meet the established criteria for participation by the club as well as by PERA department policy, may be eligible for WPE course credit. Practice and/or competition times vary but are generally in the evenings and weekends. Participating students may incur additional fees for equipment, travel, and/or uniforms.

Anticipated Instructor: To offer the course or academic credit for the club activity, the Physical Education, Recreation and Athletics Department will hire a coach (non-student) for each club sport. Ann McCarron, WPI Associate Athletic Director, oversees the Club Sport function including the hiring of qualified coaches as well as the grading.

Rationale:

Club Sport – Rangeela: Bollywood Bhangra Fusion is a newer club sport on campus and has proven sustainable enrollment, engagement and active participation the past few years. This club has Coaches (non-WPI Students) who track participation and manage the activities. Adding this to our course offerings expands our Club Sport offerings.

Impact on Distribution Requirements and Other Courses: As an elective course to fulfill the WPE graduation requirement, adding this proposed course will provide students with more diverse opportunities for fulfilling the WPE graduation degree requirements. This class is unique in its offering so there should be no impact on other courses.

Resource Needs: No other resources are needed as the funding is provided by SGA.

Implementation Date: Implementation date for this action is the 2024-2025 Academic year.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to add WPE 1239 Club Sport – Powerlifting

Motion: On behalf of the Physical Education, Recreation and Athletics Department, the Committee on Academic Operation recommends and I move, that WPE1239 Club Sport – Powerlifting as described below, be added.

Proposed Course Description:

WPE 1239 Club Sport – Powerlifting (*1/12 unit; Cat. I*)

(This is the generic listing for all current club sports) Club Sports are activities in various sports and wellness that are organized and recognized by SGA as Class II organizations and open to any undergraduate student. Students who are properly registered in advance for the club activity in their interest area (more information regarding Club Sports can be found at wpi.edu/+techsync) and meet the established criteria for participation by the club as well as by PERA department policy, may be eligible for WPE course credit. Practice and/or competition times vary but are generally in the evenings and weekends. Participating students may incur additional fees for equipment, travel, and/or uniforms.

Anticipated Instructor: To offer the course for academic credit for the club activity, the Physical Education, Recreation and Athletics Department will hire a coach (non-student) for each club sport. Ann McCarron, WPI Associate Athletic Director, oversees the Club Sport function including the hiring of qualified coaches as well as the grading.

Rationale:

Club Sport – Powerlifting is a newer club sport on campus and has proven sustainable enrollment, engagement and active participation over the last few academic years. This club has Coaches (non-WPI Students) who track participation and manage the activities. Adding this to our course offerings expands our Club Sport offerings.

Impact on Distribution Requirements and Other Courses: As an elective course to fulfill the WPE graduation requirement, adding this proposed course will provide students with additional opportunities for fulfilling the WPE degree requirements. This class is unique in its offering so there should be no impact on other courses.

Resource Needs: No other resources are needed as the funding is provided by SGA.

Implementation Date: Implementation date for this action is the 2024-2025 Academic year.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to add WPE 1613 Succeeding as an Introvert

Motion: On behalf of the Physical Education, Recreation, and Athletics Department and the Center for Well-Being, the Committee on Academic Operation recommends and I move that WPE 1613 Succeeding as an Introvert, as described below. be added.

Description of the Motion:

This motion proposes the replacement of an experimental course, WPE 207X, with a new permanent course, WPI 1613.

Proposed Course Description:

WPE 1613: Succeeding as an Introvert (Pass/NR; 1/12units; Cat I)

Does spending time in crowds or at a party wear you out? Do you enjoy time alone? Does the thought of working on a team make you nervous? Are you quiet around your classmates? Do you tend to avoid small talk or get tongue-tied in large groups? Would you rather think about a problem than discuss it with others? If you answered “yes” to several of these questions, this course is for you. Society puts a strong emphasis on extroversion, and those who frequently speak up get more attention and often advance professionally more quickly than their more reserved peers. Yet some of our greatest thinkers and leaders have been introverts.

While the teamwork culture of WPI and most professions can present challenges to introverts, career success depends on the ability to work with others. This course will help introverted students learn to thrive at college and throughout their careers. Students will learn about the nature of introversion, including the strengths and challenges of being an introvert. Students will also learn personal and professional skills, such as how to successfully work on a team, present to an audience, manage their energy levels, and have difficult conversations with others. Grades will be

Anticipated Instructors: Prof. Deskins (ChE), Prof. Boudreau (HUA), and others as their interests and schedules permit.

Rationale:

Currently in its second iteration as an experimental WPE course (has been offered for three years total), the proposed course has had healthy enrollments (with a wait list both times) and strong student interest through the end of the course. Students hear from visiting campus experts, learn about introversion, practice drawing on the benefits and overcoming the drawbacks of introversion, and apply what they learn to develop a personal improvement plan. This proposed course enables students to systematically study introversion, apply their learning to improve their wellness, and earn credit for their progress in fulfilling the WPE graduation requirement. The course was recently highlighted in [WPI Today](#).

WPI has been broadening its focus on well-being as evidenced by (a) the inclusion of Student Well-Being, Access, and Affordability as one of the focus areas in the Strategic Plan; (b) the recent creation of the Center for Well-Being; and (c) the renaming of the Wellness and Physical Education requirement. Part of the mission of the Center for Well-Being (CWB) is to collaborate with the Physical Education, Recreation and Athletics Department (PERA) to help expand the

number of wellness offerings for students to complete the WPE graduation requirement.

Impacts on students: As an elective course to fulfill the WPE graduation requirement, the proposed course will provide students with another option for fulfilling the WPE degree requirement. It will contribute to the following Undergraduate Learning Outcomes: 5) “function effectively both individually and on teams”; 8) “demonstrate global and intercultural competency by developing the capacity to identify, explain, and critically analyze the forces (such as cultural, historical, political, economic) that shape the self and others as they engage with local and global communities”; and 10) “have the skills, diligence, and commitment to excellence needed to engage in lifelong learning.” It will also support WPI’s Center for Wellbeing as one of the “cross-functional campus efforts aimed at improving student, community, and campus well-being through evidence-based practices, coordinated initiatives, the support of student and faculty research, and strategic visioning” (WPI Center for Wellbeing Mission Statement).

Resources Needed: The current instructors will teach the course as part of their regular job descriptions. No additional resources are needed in order to offer a minimum of one session per year. Stipends to further expand wellness offerings are part of the Center for Well-Being budget.

Appendix: Summary of Feedback from Experimental Offerings of the Course

Several previous versions of the course were taught: ID207X (Fall 21), PE207X (B22), and WPE207X (B23). WPE courses use a modified course evaluation format to better align with how the courses are conducted (no homework, more activity-based than knowledge-based, etc). Since this was the first WPE experimental course taught in a classroom setting, the instructors administered end of term unofficial surveys to assess the effectiveness of this course and how to improve it. Below is a summary of these surveys.

1. Student Feedback

- Thank you for a great class! I enjoyed each class and found it a great space to be open about introversion and learn from other introverts as well.
- This class was really fun and a really great opportunity to self reflect on a regular basis. I'm glad I took this class because it gave me a wider understanding of my introversion, while still validating my experiences and fears rather than forcing myself to act extroverted.
- Very interesting class and I learned a lot.
- The dean who spoke about introversion was excellent, I tend to know myself very well but his lecture gave me new insight into myself as an introvert. He is definitely someone that should speak every time this class is run
- The course has a good outline of class topics. It would be cool to go deeper into the psychology and biology of it, but that’s coming from a biology major haha I’m not sure if others would be as interested
- Not much, it was pretty good the way it was.
- I enjoyed the guest speakers coming in, they were incredibly knowledgeable and encouraged the students to ask questions
- I liked learning more things about being an introvert and how I can use it to my benefit.
- I liked hearing about these strategies and approaches to problems that i face as an introvert.
- I liked that we were able to learn practical information that we can implement in our own lives. The guest speakers were also a great addition to the course.
- Introversion is not a topic that gets talked about a lot, so I liked how attention is brought to

it in this course.

- It shed some light on aspects of myself that I didn't understand
- I liked the components of this class that gave us tips to improve our own lives, for example the homeworks on improving group work dynamics, relieving stress, and helping develop our relationships.

2. Feedback from course evaluations

ID207X (Fall 21)

Q: Do you feel that course objectives were met?

Average score of 5 (1 to 5 point scale)

Q: How was the content of the course?

Average score of 4.33 (1 to 5 point scale)

PE207X (B22)

Q: My overall rating of the course is:

Average score of 4.5 (1 to 5 point scale)

Q: The amount I learned from the course was:

Average score of 4.0 (1 to 5 point scale)

PE207X (B23)

Q: My overall rating of the course is:

Average score of 4.0 (1 to 5 point scale)

Q: The amount I learned from the course was:

Average score of 3.7 (1 to 5 point scale)

3. Outcomes from questions 1, 2, 9, and 26 of course evaluations.

Not applicable.

4. Instructor feedback and reflections (e.g., did the course meet the learning objectives or outcomes) from experimental offerings if applicable.

After seeing many WPI students struggle with being in a society that values extroversion so highly, we created a course to help introvert students become empowered, more ready to work on teams, and navigate the stresses of life. Our goal was to help students learn important life skills and how to better navigate their university and professional careers. We were not sure how the course would be received by students or how much interest there would be in the topic. In recent years the course filled to capacity, with students still wanting to get in. The interactions with students have been very rewarding, as we've seen students feel a sense of solidarity with other introverts. They've realized that being an introvert is not unusual. Much homework of the course requires students to reflect on their experiences as an introvert. This has helped students understand more about their nature, and how it's ok to be an introvert. We've also been impressed by the end of course projects, where students pick a topic related to introversion to study and address in detail. Students have developed projects on topics such as how to network better, or how to advocate for one's self. By several measures, the course was a great success to help students learn more about introversion and how to flourish as an introvert.

5. Population numbers.

ID207X Fall 21	PE207X B22	WPE207X B23
5	49	46

Date: April 11, 2024
To: WPI Faculty
From: Committee on Academic Operations (Prof. Van Dessel, Chair)
Re: Motion to modify the title of WPE 1611 Koru Mindfulness Meditation

Motion: On behalf of the Physical Education, Recreation, and Athletics Department and the Center for Well-Being, the Committee on Academic Operation recommends and I move that the course title of WPE 1611 Koru Mindfulness Meditation be changed to “Introduction to Mindfulness,” as described below.

Description of the Proposed Modifications:

Current course title, description and course offering schedule:

WPE 1611 Koru Mindfulness Meditation (1/12 unit; Cat. I)

Koru Mindfulness is an evidence-based mindfulness curriculum designed for college aged adults. During this course, you will learn useful, practical tools to help manage your stress and increase self-compassion. Students will practice a variety of meditation skills, engage with the Koru Mobile App, read the companion book, and participate in class discussion.

Proposed course title, description, and course offering:

WPE 1611 Introduction to Mindfulness (Cat. I, 1/12 unit)

Introduction to Mindfulness is an evidence-based mindfulness curriculum designed for college aged adults by the Mindfulness Institute for Emerging Adults (MIEA). During this course, you will learn useful, practical tools to help manage your stress and increase self-compassion. Students will practice a variety of meditation skills, engage with the MIEA Mobile App, read the companion book, and participate in class discussion.

Rationale:

The Center for Koru Mindfulness recently changed its name to The Mindfulness Institute for Emerging Adults (MIEA) and changed the name of its curriculum from Koru to MIEA Intro to Mindfulness. As a result, the course name of WPE 1611 needs to be changed to reflect this new name as this is the instructors teach are certified MIEA instructors and teach the MIEA curriculum.

This title change reflects a name of title only, to be in alignment with the name change of the Center for Koru Mindfulness to Mindfulness Institute for Emerging Adults (MIEA). The name change does not reflect a change in the course learning objectives or content, only the name. This course continues to be a popular choice among students for fulfilling the WPE credit and part of the Center for Well-Beings strategic initiatives in expanding wellness offerings for WPE credit.

Impacts on students: Once the name is changed in the course schedule and the catalog, there will be no impact on the students.

Resources Needed: Resource needs to continue to teach this course with the new name remain unchanged.

- The CWB currently has three MIEA certified instructors to teach this course and certification fees are covered by the CWB budget.
- Classes are offered in the CWB Programming room, which was designed in part to support meditation instruction.

- The library has unlimited electronic copies of the required book, *The Mindful Twenty Something*, as well as several print copies of the book.
- No Information Technology support needed. The app used for the class is supported by MIEA.

Implementation Date: The name change will be implemented in the 2024-2025 Academic year. Multiple sections of this course will continue to be offered each term.

Date: April 11, 2024

To: WPI Faculty

From: Committee on Academic Operations (Prof. Van Dessel, Chair)

Re: Motion to add DS 4099 Special Topics in Data Science and add it to the disciplinary elective courses in the Data Science Program

Motion: On behalf of the Data Science Program, the Committee on Academic Operations recommends and I move that DS 4099 Special Topics in Data Science be added as a new course and that it be added to the disciplinary elective courses in the Data Science Program, as described below:

Description of the Motion:

Proposed Course Description:

DS 4099. SPECIAL TOPICS IN DATA SCIENCE (*CAT III - Offered at the discretion of the program*)

Instances of this course will explore advanced and emerging topics in Data Science that are not covered by the current regular Data Science offerings. Content and format will vary to suit the interests and needs of the faculty and students. This course may be repeated by students for credit as topics change.

Changes to the Catalog:

1. In the online Data Science catalog page: <https://wpi.cleancatalog.net/data-science>
Under “Classes”, please add DS 4099 with the above course description at the end of the course list.
2. In the online Data Science Major catalog page: <https://wpi.cleancatalog.net/data-science/data-science-major>
Add the following sentence “DS 4099: Special Topics in Data Science is counted as a disciplinary elective course.” below the following existing sentence “Disciplinary electives must include at least 4/3 units at the 4000 level or above.” (Please do the line change)
3. In Data Science Major pdf page:
<https://wpi.cleancatalog.net/sites/default/files/pdf/degree/data-science-major.pdf?generated=1705789243>
Add the following sentence “DS 4099: Special Topics in Data Science is counted as a disciplinary elective course.” below the following existing sentence “Disciplinary electives must include at least 4/3 units at the 4000 level or above.” (Please do the line change)
4. In the online Data Science Minor catalog page: <https://wpi.cleancatalog.net/data-science/data-science-minor>
Add the following sentence “DS 4099: Special Topics in Data Science is counted as a disciplinary elective course” below the following existing sentence “Any graduate course approved for the Data Science graduate program can also be counted towards the Data Science minor. These courses are not repeated here.” (Please do the line change)

5. In Data Science Minor pdf page:

<https://wpi.cleancatalog.net/sites/default/files/pdf/degree/data-science-minor.pdf?generated=1708702305>

Add the following sentence “DS 4099: Special Topics in Data Science is counted as a disciplinary elective course” below the following existing sentence “Any graduate course approved for the Data Science graduate program can also be counted towards the Data Science minor. These courses are not repeated here.” (Please do the line change)

Rationale:

The purpose of this course is to teach cutting-edge special topics to students. Given the area of data sciences is changing so rapidly, this course would allow the Data Science program to offer emerging topic courses based on interest and availability of faculty. This course allows for flexibility in swiftly providing courses to students, enabling them to explore complementary subjects that may not have been regularly offered within the Data Science program. We anticipate that this special topics course will allow the Data Science program to provide offerings which keep pace with recent advances in Data Science, and the rapidly evolving Data Science needs of industry.

Impacts on Students: The course will be offered as an elective course in Data Science program.

Anticipated Instructors: Assistant Professor Fabricio Murai will teach a special topics course in the 2024-2025 academic year at the undergraduate level. Moving forward, other Data Science faculty members may also offer an instance of this new special topics course on various topics based on their interests and the availability of teaching slots in the program.

Resources Needed: No additional resources would be required.

Implementation Date: The implementation date is the 2024-2025 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to establish a specialty in Artificial Intelligence in Business within the MBA program

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that a specialty in Artificial Intelligence in Business within the MBA program be established, as described below.

Description of the Motion:

Artificial Intelligence in Business should be added under the Master of Business Administration (MBA) specialty list in the graduate catalog (Page 166, Online 2023-24 catalog). It should also be added as a table (Pg 167, Online 2023-24 Catalog). It should appear after Specialty in Applied Analytics and before Specialty in Brands, Products, and Consumers to maintain the alphabetic order.

Proposed Course/Catalog Description:

Specialty in Artificial Intelligence in Business

Item #	Title	Credits
MIS 587	Business Applications in Machine Learning	3

Select one of the following courses:

Item #	Title	Credits
MIS 520	Artificial Intelligence & Its Ethical Applications in Business	3
MIS 581	Policy and Strategy for Information Technology, Artificial Intelligence, and Analytics	3

Select one of the following courses:

Item #	Title	Credits
MIS 510	Business Application of Blockchain Tech	3
MKT 562	Marketing Research	3
MKT 568	Marketing Analytics	3
OIE 552	Modeling and Optimizing Processes	3

Rationale:

Artificial Intelligence is changing the way organizations deliver value to their customers and stakeholders. Through this specialty, WBS students (part-time working professionals and full-time students) will learn tools and techniques to formulate AI strategy and policy, design and implement AI-based business solutions and applications, and use AI applications ethically and responsibly.

Impact on Degree Requirements: Artificial Intelligence in Business will be offered as a graduate specialty in the MBA program.

Resources and Anticipated Instructors: No new resources, courses, or faculty are needed.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to establish a specialty in Artificial Intelligence in Business within the MS in Business Analytics program

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that a specialty in Artificial Intelligence in Business within the MS in Business Analytics program be established, as described below.

Description of the Motion:

Artificial Intelligence in Business should be added under the MS(Business Analytics) specialty list in the graduate catalog (Page 171, Online 2023-24 catalog). It should also be added as a table (Pg 172, Online 2023-24 Catalog). It should appear after Specialty in Advanced Business Analytics Methods and before Specialty in Marketing Analytics to maintain the alphabetic order.

Proposed Course/Catalog Description:

Specialty in Artificial Intelligence in Business

Item #	Title	Credits
MIS 587	Business Applications in Machine Learning	3

Select one of the following courses:

Item #	Title	Credits
MIS 520	Artificial Intelligence & Its Ethical Applications in Business	3
MIS 581	Policy and Strategy for Information Technology, Artificial Intelligence, and Analytics	3

Select one of the following courses:

Item #	Title	Credits
MIS 510	Business Application of Blockchain Tech	3
MKT 562	Marketing Research	3
MKT 568	Marketing Analytics	3
OIE 552	Modeling and Optimizing Processes	3

Rationale:

Artificial Intelligence is changing the way organizations deliver value to their customers and stakeholders. Through this specialty, WBS students (part-time working professionals and full-time students) will learn tools and techniques to formulate AI strategy and policy, design and implement AI-based business solutions and applications, and use AI applications ethically and responsibly.

Impact on Degree Requirements: Artificial Intelligence in Business will be offered as a graduate specialty in the MSBA program.

Anticipated Instructors: No new faculty are needed.

Resources Needed: No new resources or courses are needed.

Implementation: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to establish a specialty in Artificial Intelligence in Business within the MS in Information Technology program

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that Artificial Intelligence in Business, a new graduate specialty be added to the WPI Graduate Catalog, as described below.

Description of the Motion:

Artificial Intelligence in Business should be added under the M.S. in Information Technology (MSIT) specialty list in the graduate catalog (Pg 175, Online 2023-24 Catalog). It should also be added as a table (Pg 175, Online 2023-24 Catalog). It should appear first (before all existing specialties) to maintain the alphabetic order.

Proposed Course/Catalog Description:

Specialty in Artificial Intelligence in Business

Item #	Title	Credits
MIS 587	Business Applications in Machine Learning	3

Select one of the following courses:

Item #	Title	Credits
MIS 520	Artificial Intelligence & Its Ethical Applications in Business	3
MIS 581	Policy and Strategy for Information Technology, Artificial Intelligence, and Analytics	3

Select one of the following courses:

Item #	Title	Credits
MIS 510	Business Application of Blockchain Tech	3
MKT 562	Marketing Research	3
MKT 568	Marketing Analytics	3
OIE 552	Modeling and Optimizing Processes	3

Rationale:

Artificial Intelligence is changing the way organizations deliver value to their customers and stakeholders. Through this specialty, WBS students (part-time working professionals and full-time students) will learn tools and techniques to formulate AI strategy and policy, design and implement AI-based business solutions and applications, and use AI applications ethically and responsibly.

Impact on Degree Requirements: Artificial Intelligence in Business will be offered as a graduate specialty in the MSIT program.

Anticipated Instructors: No new faculty are needed.

Resources Needed: No new resources or courses are needed.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to establish a graduate certificate program in Artificial Intelligence in Business within the WBS

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that a graduate certificate in Artificial Intelligence in Business, be established within the Business School, as described below.

Description of the Motion:

Proposed Course/Catalog Description:

Certificate in Artificial Intelligence in Business

Degree Type: Certificate

The Artificial Intelligence in Business Certificate will prepare professionals with the necessary technological and business foundations to formulate AI strategy and policy, design and implement AI-based business solutions and applications, and use AI ethically and responsibly.

This certificate can be pursued on a standalone basis. In addition, WPI graduate students are often able to combine the Certificate with other programs with no additional coursework by leveraging their other program's electives.

If you decide to pursue further study, certificate credits can be applied toward a graduate degree. To apply for this certificate program, you must have a Bachelor's degree in any discipline.

Curriculum

The graduate certificate in Artificial Intelligence in Business requires completion of three courses as follows: one required course for a total of three credits, one course for a total of three credits from the given two course choices, and one course for a total of three credits from the given four course choices.

Item #	Title	Credits
MIS 587	Business Applications in Machine Learning	3

Select one of the following courses:

Item #	Title	Credits
MIS 520	Artificial Intelligence & Its Ethical Applications in Business	3
MIS 581	Policy and Strategy for Information Technology, Artificial Intelligence, and Analytics	3

Select one of the following courses:

Item #	Title	Credits
MIS 510	Business Application of Blockchain Tech	3
MKT 562	Marketing Research	3
MKT 568	Marketing Analytics	3
OIE 552	Modeling and Optimizing Processes	3

Rationale:

Artificial Intelligence is changing the way organizations deliver value to their customers and stakeholders. Through this graduate certificate, WBS students (part-time working professionals and full-time students) will learn tools and techniques to formulate AI strategy and policy, design and implement AI-based business solutions and applications, and use AI applications ethically and responsibly.

Impact on Degree Requirements: Artificial Intelligence in Business will be offered as a graduate certificate.

Anticipated Instructors: No new faculty are needed.

Resources Needed: No new resources or courses are needed.

Implementation: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Graduate Studies and Research (Prof. Olson, Chair)
Re: Motion to modify the description of FIN 598 Special Topics

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that the course description of FIN 598 Special Topics be modified, as described below.

Proposed Modifications to the Course Description:

Current description (page 380 of AY 23-24 graduate catalog; strikethrough text is to be deleted in revised description)

FIN 598: Special Topics

Department: ~~Finance~~

Credits: ~~3-0~~

(No detailed course description appears in the 2023-2024 Graduate Catalog))

Revised description (additions and updates in yellow)

FIN 598: Special Topics

This course will engage students at an advanced level in the exploration of special topics that reflect the expertise of the business school's FIN faculty. It will serve as a flexible vehicle to provide a course offering of topics of current interest as well as to offer new topics before they are made into a permanent course. The course content and format vary to suit the interests and needs of the faculty and students.

Department: The Business School

Credits: Variable

Rationale:

This course will serve as a special topics course for the FIN discipline in the WPI Business School. A description is being added to keep it consistent with the three new special topics courses that have a similar description. Credits are being modified to offer flexibility to the student, faculty, and department while launching future special topics courses.

Impact on Degree Requirements: None

Resources Needed: We would not need any additional resources for this.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024
To: WPI Faculty
From: Committee on Graduate Studies and Research (Prof. Olson, Chair)
Re: Motion to modify the description of MKT 598 Special Topics

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that the course description of MKT 598 Special Topics be modified, as described below.

Proposed Modifications to the Course Description:

Current description (on page 385 of 23-24 graduate catalog; strikethrough text is to be deleted in revised description)

MKT 598: Special Topics

Department: ~~Marketing~~

Credits: ~~3-0~~

Revised description (additions and updates in yellow)

MKT 598: Special Topics

This course will engage students at an advanced level in the exploration of special topics that reflect the expertise of the business school's MKT faculty. It will serve as a flexible vehicle to provide a course offering of topics of current interest as well as to offer new topics before they are made into a permanent course. The course content and format vary to suit the interests and needs of the faculty and students.

Department: The Business School

Credits: Variable

Rationale:

This course will serve as a special topics course for the MKT discipline in the WPI Business School. A description is being added to keep it consistent with the three new special topics courses that have a similar description. Credits are being modified to offer flexibility to the student, faculty, and department while launching future special topics courses.

Impact on Degree Requirements: None

Resources Needed: We would not need any additional resources for this.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to add ETR 598 Special Topics

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that ETR 598 Special Topics, as described below, be added.

Proposed Course Description:

ETR 598: Special Topics

This course will engage students at an advanced level in the exploration of special topics that reflect the expertise of the business school's ETR faculty. It will serve as a flexible vehicle to provide a course offering of topics of current interest as well as to offer new topics before they are made into a permanent course. The course content and format vary to suit the interests and needs of the faculty and students.

Department: The Business School

Credits: Variable

Rationale:

This course will serve as a special topics course for the ETR discipline in the WPI Business School.

Impact on Degree Requirements: None

Resources Needed: We would not need any additional resources for this.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to add MIS 598 Special Topics

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that MIS 598 Special Topics, as described below, be added.

Proposed Course Description:

MIS 598: Special Topics

This course will engage students at an advanced level in the exploration of special topics that reflect the expertise of the business school's MIS faculty. It will serve as a flexible vehicle to provide a course offering of topics of current interest as well as to offer new topics before they are made into a permanent course. The course content and format vary to suit the interests and needs of the faculty and students.

Department: The Business School

Credits: Variable

Rationale:

This course will serve as a special topics course for the MIS discipline in the WPI Business School.

Impact on Degree Requirements: None

Resources Needed: We would not need any additional resources for this.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to add OBC 598 Special Topics

Motion: On behalf of the Business School, the Committee on Graduate Studies and Research recommends, and I move that OBC 598 Special Topics, as described below, be added.

Proposed Course Description:

OBC 598: Special Topics

This course will engage students at an advanced level in the exploration of special topics that reflect the expertise of the business school's OBC faculty. It will serve as a flexible vehicle to provide a course offering of topics of current interest as well as to offer new topics before they are made into a permanent course. The course content and format vary to suit the interests and needs of the faculty and students.

Department: The Business School

Credits: Variable

Rationale:

This course will serve as a special topics course for the OBC discipline in the WPI Business School.

Impact on Degree Requirements: None

Resources Needed: We would not need any additional resources for this.

Implementation Date: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to modify the title and description of MIS 581 Policy and Strategy for Information Technology and Analytics

Motion: On behalf of the WPI Business School, the Committee on Graduate Studies and Research recommends, and I move that the title and course description of MIS 581 Policy and Strategy for Information Technology and Analytics be modified, as described below.

Description of the Proposed Modifications:

Current course title and description:

MIS 581: Policy and Strategy for Information Technology and Analytics

This course focuses on the core IS capabilities that IS managers must consider when managing technology within an organization, such as IT strategy, policy development, management, and IT's role in data analytics. Fast-paced changes in technology require IT managers to quickly understand, adapt, and apply technology. Successful companies are those that can react quickly by introducing innovative technologies and respond to market demands using data driven solutions. Students will learn how IT managers engage data to develop and enhance their departments' strategies.

Department Management Information Systems

Credits 3.0

Revised course title and description: (with revised text highlighted in yellow)

MIS 581: Policy and Strategy for Information Technology, Artificial Intelligence, and Analytics

This course focuses on the core IT capabilities that IT executives and managers must consider when creating strategy and policy for the deployment and use of information technologies, AI tools and techniques, and data within an organization. Those IT capabilities include both operational uses of such technologies, tools, and data, as well as strategic decision making for deploying advanced AI and Analytics capabilities. The expanding role of IT executives to encompass AI and Analytics capabilities as well as the fast-paced changes in technology require IT executives and managers to quickly understand, adapt, and apply technology that can provide value to organizations. Successful organizations are those that can react quickly by introducing innovative technologies and respond to market demands using data driven solutions produced by the ethical use of AI and Analytics models and tools. Students will learn how IT managers engage data and AI tools ethically to develop and enhance their departments' strategies.

Department Management Information Systems

Credits 3.0

Rationale:

Over the last decade, IT executives and managers have taken on an expanded role to support the data and analytics techniques needed for modern data-informed decision making. Now they are

also taking on AI strategy for the organization, as well as selecting and deploying AI tools and techniques. This revised course recognizes this recent role expansion by adding topics about AI policy and strategy for an organization and about the deployment of AI tools and techniques in an organization. The course provides students with knowledge of AI strategic and operational choices and understanding of how to choose an appropriate strategy that will provide value to an organization, given its goals and capabilities. Including AI in the IT Policy and Strategy course will give students the skills and AI knowledge that are highly sought by employers. Overall, this revised course keeps our specialty Masters programs, especially the MS IT and MS Business Analytics, up-to-date with trends in industry and consistent with WBS mission. The course will continue to be offered in its usual online asynchronous format.

Impact on Degree Requirements: This revised course will continue to be offered in the same WBS programs and specialties as the current version of the course. There are no impacts on programs outside of the WPI Business School. This course will be included in the new Artificial Intelligence in Business specialty and associated graduate certificate, proposed in a separate motion.

Anticipated Instructors: No new faculty are needed.

Resources Needed: No new resources or courses are needed.

Implementation: The implementation date for this action is the 2024-25 academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to add SS 510 Principles of Epidemiology

Motion: On behalf of the Department of Social Science and Policy Studies and the Global Health Graduate Program, the Committee on Graduate Studies and Research recommends, and I move that SS 510 Principles of Epidemiology, as described below, be added.

Proposed Course Description:

SS 510: Principles of Epidemiology (*3 credits; Cat. I*)

Epidemiology studies the historical pattern of disease in populations to describe and identify distributions of diseases and opportunities for intervention. This course serves as a cornerstone for the quantitative aspects of global health and focuses quantitatively on the distribution and determinants of health in populations and communities. The goal is to provide a scientific and engineering foundation that seeks to reduce risk factors and improve health in a population through a strong quantitative analysis of causation, problem-solving, analytic reasoning. The study of epidemiology evaluates the multifactorial etiology and pathophysiology of chronic diseases and applies criteria for identification, prevention and control of infectious agents. The discipline also contributes to public health practice and policy and is designed to introduce students to the principles and methods of health investigations.

Recommended background: Acceptance into the Global Health Graduate program or permission of instructor.

Anticipated instructor: TBD

Rationale:

SS 510 is a core course in the proposed graduate program in Global Health. It is designed to provide students with a broad understanding multifactorial etiology and pathophysiology of chronic diseases and applies criteria for identification, prevention and control of infectious agents.

This course is part of a two-pronged approach that also includes a Graduate Qualifying Project, or GQP. The aim is to create an interdisciplinary program that a) is truly global in terms of cross-cultural perspectives; and b) embodies the WPI tradition of interdisciplinary global projects that approach global challenges at the intersection of science, technology and society through integrative preparation and global fieldwork.

The course will add to WPI's offerings on health, including the existing minor program in Global Public Health, and will also offer students in other graduate programs (including Community Climate Adaptation and Science and Technology for Innovation in Development, and future programs such as Architectural Engineering) an elective option.

Resources Needed:

- This is a new graduate course and will be part of the normal load.
- Classroom/Zoom space for 25-30 people
- Laboratory: N/A
- Library resources: N/A

- Information Technology: N/A

Impact on Distribution Requirements and Other Courses: None

Implementation Date: First offering will be in Spring 2025

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to add DEV 550 Policy Evaluation

Motion: On behalf of the Department of Social Science and Policy Studies, the Committee on Graduate Studies and Research recommends and I move that DEV 550 Policy Evaluation, as described below, be added.

Proposed Course Description:

DEV 550 Policy Evaluation (3 credits)

Policy evaluation involves the development of evaluation questions, the research designs, and the data analysis to answer the questions. Students will learn the assessment of the needs and concerns of stakeholders, the knowledge of analytical tools, including randomized-controlled trials (RCTs), and the ability to formulate evidence-based recommendations. We begin by examining the advantages and disadvantages of using observational studies to identify the determinants of outcomes in which policy makers are often interested. We then consider quasi-experiments and learn about their advantages and disadvantages. Finally, we focus on how to use RCTs in the field to obtain accurate measures of policy effectiveness. We will cover a significant amount of literature on education, health, agricultural, and finance-related interventions. You will also complete a research project that will give you the opportunity to develop the skills necessary to successfully design, conduct, and analyze the results of RCTs aimed at answering important policy questions.

Recommended background: Basic knowledge of the common methods (qualitative and quantitative) that are typically used for evaluating development-related policy and interventions. (DEV 540, or equivalent, such as a basic Statistics course or another similar course).

Anticipated Instructor: Alexander Smith, Associate Professor, SSPS

Projected enrollment is the cohort size of the program (~10 to 12 students per year).

This course will not be cross-listed.

This course has not been previously offered as an experimental course.

Rationale:

The Master's program in Science and Technology for Innovation in Global Development currently includes one methodology course (DEV 540) that is rather broad in its nature and covers a variety of methods (it is a mixed-methods course) - DEV 540 is an introductory methods course at the graduate level.

This course (DEV 550) is a follow-up course that goes into greater detail on the specific method of using randomized-controlled trials (RCTs) in the field to measure the effectiveness of development related interventions.

The primary learning objective is development of the skills necessary to design and conduct RCTs in the field (see attached course syllabus for more detail).

The course may be of interest to students in the Learning Sciences and Technology program as they test new educational technologies/interventions in the field using randomized-controlled trials (RCTs).

Resources Needed:

- Alexander Smith, Associate Professor and Experimental Economist, SSPS, is available to teach this course.
- A regular classroom is all that is required for class meetings.
- No lab, library, or special information technologies are required.

Impact on Distribution Requirements and Other Courses: No anticipated impacts

Implementation Date: Implementation date for this action is the 2024-2025 Academic year.

Date: April 11, 2024

To: WPI Faculty

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

Re: Motion to modify the course number of DS 557 Machine Learning for Engineering

Motion: On behalf of the Data Science Program, the Committee on Graduate Studies and Research recommends, and I move that the course number of DS 557 Machine Learning for Engineering & Science Applications be modified to DS 5006.

Rationale:

The course number DS557 had been assigned to this course as part of the motion that established the MS program in Artificial Intelligence. Given it is a course designed primarily for non-DS majors and/or students with limited programming and/or mathematical experience, we suggest that a 5006 number is appropriate to reflect the preparatory nature of this course.

Resources Needed: This requires no changes in resources.

Implementation Date: Immediate. The change would take place immediately and be reflected in the catalog in the 2024-2025 academic year.