

**WORCESTER POLYTECHNIC INSTITUTE**

December 12, 2017

To: The WPI Faculty

From: Mark Richman  
Secretary of the Faculty

The fourth Faculty meeting of the 2017-2018 academic year will be held on **Tuesday, December 12, 2017** at **11:00 am** in **Olin Hall 107**, with refreshments at 10:45 am.

- |  |            |
|--|------------|
| 1. Call to Order   | M. Richman |
| <ul style="list-style-type: none"><li>• Approval of the Agenda</li><li>• Consideration of the Consent Agenda<br/>(including Minutes from 11-16-17)</li></ul>         |            |
| 2. President's Report  | L. Leshin  |
| 3. Provost's Report  | B. Bursten |
| 4. Committee Business  |            |
| Committee on Governance (COG)  | M. Richman |
| <ul style="list-style-type: none"><li>• Motion to adopt a New WPI Research Conduct Policy</li></ul>  |            |
| Committee on Graduate Studies and Research (CGSR)  | K. Troy    |
| <ul style="list-style-type: none"><li>• Motion to modify Internships section of Graduate Catalog<br/>and add course designators for Internships</li></ul>            |            |
| Committee on Governance (COG) - for discussion, only   | L. Albano  |
| <ul style="list-style-type: none"><li>• Motion to modify By-Law Five of the Faculty Handbook<br/>(concerning term limits for the Secretary of the Faculty)</li></ul> |            |
| 5. New Business  |            |
| 6. Announcements   |            |
| 7. Adjournment   |            |

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**WORCESTER POLYTECHNIC INSTITUTE**  
**Faculty Meeting Minutes, November 16, 2017**

**Summary:**

1. Call to Order
2. President's Report
3. Provost's Report
4. Committee Business: COG, CGSR
5. Announcements
6. Adjournment

**Detail:**

1. Call to Order

The third Faculty meeting of the 2017-2018 academic year was called to order in Olin Hall 107 by **Prof. Richman** (ME). The meeting agenda (with the item concerning the Global Impact Division removed) and the consent agenda (including the minutes from October 13, 2017) were approved.

2. President's Report

**President Leshin** thanked Prof. Richman and Prof. Gaudette and all of COG for their efforts to bring the Global Impact Division (GID) motion to today's meeting. President Leshin explained that a GID advisory group (led by Dean Rissmiller and Dean Wobbe) has been formed to gather faculty input to maximize synergies between groups, to anticipate staffing needs, and to ensure that the transition to the GID does not have any unintended consequences. However, in order to allow the advisory group to do its work first, the decision was made to withdraw the GID motion from today's agenda. President Leshin emphasized the importance of expanding our global impact. So it is important to her that we do it well rather than quickly. She explained that this approach will delay any needed academic administrative search for a year, and will mean that the Foisie Innovation Studio will open before any new academic division is in place.

**President Leshin** encouraged everyone to view the permanent Hall of Luminaries display in the Campus Center, and was confident that the Hall of Luminaries itself would serve as an effective way to recognize the outstanding achievements of our most accomplished community members.

**President Leshin** indicated that the Board of Trustees was considering the feasibility of a comprehensive fundraising campaign for WPI. A consulting group is helping set priorities (aligned with WPI's Strategic Plan) and a reasonable goal for the campaign. President Leshin also indicated that the Annual Planning and Budget Process has begun, and faculty members should feel free to contact Profs. Dominko, Gaudette, or Richman, who are directly involved in the process. The goal is to propose a final budget for the May Board meeting.

3. Provost's Report

**Provost Bursten** described a panel discussion that took place at the Board of Trustees' Academic Planning Committee (APC) meeting in November. The panel consisted of WPI faculty members (Dean Soboyejo, Prof. Korkin, Prof. Mattson, Prof. Roberts, and Prof. Troy) who had previously been at R1 universities. The panel discussed ways to recruit more faculty members from R1 institutions and what WPI could do to enhance the research environment here. VPR Vernescu gave the APC an overview of the Research Solutions Institute (RSI), as well. Provost Bursten gave the APC a report on the recent hiring of WPI faculty members, including the fact that nine of the 17 tenured and tenure-track faculty members hired this year were woman.

4. Committee Business

Committee on Governance (COG)

**Prof. Gaudette** (BME), for the Committee on Governance (COG), made a presentation (for discussion, only) on a proposed new Research Conduct Policy. (See **Addendum #1** on file with these minutes.) After collecting feedback, COG will bring the motion for a vote in December. Prof. Gaudette explained that we need to consolidate our current Faculty-approved policy and the Trustees-approved policy into a single consistent policy. We also need to modify our policy based on recent feedback we have gotten from the Office of Research Integrity (ORI).

**Prof. Gaudette** described the working group of three Trustees (Jack Mollen, Joan Szkutak, and Marni Hall) and three faculty members (Prof. Boudreau, Prof. Gaudette, and Prof. Richman) that worked to develop the proposed policy. The group was advised by University Counsel Bunis. Issues that needed to be addressed in the policy included: a proper definition of research misconduct; ability to file initial allegation using forms of communication other than in writing, only; applicability of the policy to all faculty members, staff members, and students; assurance that WPI could take appropriate interim actions; conflict of interest protections for respondents, complainants, and witnesses; and proper reporting requirements to ORI.

**Prof. Gaudette** pointed out that the proposed policy includes a “duty to report” section. In addition, the Provost is the “deciding official” throughout the process, and no longer are there any restrictions on how the Provost may decide. However, all disciplinary actions may be appealed, and if the disciplinary action is revocation of tenure, the appeal involves a new five-member faculty committee. When an allegation of misconduct is made and brought to the attention of the VPR, there is a three-step process that would take place: an initial assessment by the VPR (within five days); an initial inquiry (within 60 additional days); and a formal investigation (within 120 additional days). The case could be dismissed at the end of any of these stages. The appeals processes would be available if the respondent were found to have committed research misconduct.

**Prof. Humi** (MA) asked for a clarification of the definition of research misconduct. **Prof. Gaudette** explained that the definition (included in the policy) is fabrication, falsification, or plagiarism in research activities or deliberate interference.

**Prof. Billiar** (BME) asked about the time frame for approving the policy. **Prof. Gaudette** explained that the Faculty would vote on the policy at the December 12 Faculty meeting, after which the Executive Committee of the Board will vote on it at their December 15 meeting.

**Prof. Salazar** (CEE) asked if the five-member faculty committee for an appeal of revocation of tenure would be formed independent of the Faculty Review Committee (FRC). **Prof. Richman** confirmed that the new appeals committee would not involve the FRC members, but would be appointed in collaboration between the Chair of the Board and the Secretary of the Faculty.

**Prof. Demetry** (ME) suggested being more clear about the issues that the five-member appeals committee should review, and wanted to know if the committee were limited to addressing the appropriateness of the sanction. She also suggested that the flow chart describing the process and the timelines be readily accessible to the community if and when the policy is adopted.

**Prof. Hakim** (ECE) thought that the new policy was significantly different from the current Faculty-approved policy, particularly with respect to a shift in the balance of power from the faculty to the administration. He asked about the legal value of the policy, and wanted to know what recourse is available to the respondent if the administration violates the policy. As an example of a significant difference, Prof. Hakim pointed out that, unlike in the current Faculty-approved policy, the proposed policy no longer allows the Inquiry committee to dismiss the case on its own. **Prof. Gaudette** agreed that the two policies differed in that way, and explained that the change was made to conform to the ORI sample policy. Also, as protection for the faculty, the Inquiry committee’s report would be submitted to the ORI. **Prof. Boudreau** (HU&A) explained that the working group is responsible for drafting a policy and the Faculty are responsible for deciding whether it is acceptable, but we are not responsible to determine what happens if the policy is violated.

**Prof. Fehribach** (MA) asked about the scenario in which the Provost were to bring an allegation to the VPR whose initial assessment moved the allegation forward. **Prof. Gaudette** explained that in that case, the Provost would have a conflict of interest and the policy has the President fulfilling the role of the Provost.

**Prof. Demetriou** (ME) asked about the absence of a statute of limitations in the policy, and about incidents involving current WPI faculty members that may have occurred at a previous institutions. **Mr. Bunis** (Univ. Counsel) agreed that on this point we should make sure that the policy is consistent with the federal guidelines. **VPR Vernescu** pointed out that there are instances when corrective action might be needed regardless of when

the misconduct occurred. **Prof. Boudreau** (HUA) explained that the proposed policy covers research conducted at previous institutions by current WPI faculty, staff, and students.

**Prof. Billiar** (BME) asked how the policy would involve the Dean of Students Office in the case of an allegation against a student. **Prof. Gaudette** explained that if the research were funded, the case would fall under this policy. Otherwise, the student case would be handled as an academic matter through the Campus Hearing Board.

**Prof. Dominko** (BBT) wanted to make sure in all cases (including when the case is dismissed) that a proper paper trail was maintained for funding agencies. **Prof. Gaudette** pointed to those places in the policy where the ORI must be notified, and **Prof. Richman** pointed out that the policy also requires that the basis for decisions be documented and maintained internally as part of the permanent record for later discovery.

**Prof. Hakim** (ECE) repeated his point about a shift in the balance of power, and emphasized that the policy should, but in its current form does not, include protections against abuse of the procedures. He believed that parts of the policy are too vague, and that there was little point to having others make recommendations about the sanction if the Provost were to have the final authority to decide. In the case of false accusations, he thought the policy was not at all clear about what should be done by the institution to restore the respondent's reputation. In his view, the policy did not represent an example of shared governance. **Prof. Gaudette** pointed out that the proposed policy is modelled after the ORI sample policy, which includes a single deciding official. He also clarified that the Investigation committee recommends sanctions through the VPR to the Provost who acts as the deciding official.

**Prof. Apelian** (ME) expressed his view that the proposed policy was extremely fair.

**Prof. Demetriou** (ME) asked at what stages are reports made to the funding and other affected external agencies. **Prof. Gaudette** explained that the funding agency would be notified that an investigation is underway, but only at the final stage could the funding agency, journals, etc. be notified of the final resolution of the case.

**Prof. Rissmiller** (IGSD) asked if COG or anyone else involved has considered using of this process as a model for other disciplinary policies such as the sexual harassment or faculty conduct policies. **Prof. Gaudette** could not say at this time how those other policies might be modified.

**Prof. Humi** (MA) wanted to confirm that in the proposed policy the Provost could overturn a committee decision just as he or she could in tenure and promotion cases. **Prof. Gaudette** confirmed that was true, but pointed out that the investigation report (including the committee's vote count) would be forwarded to ORI along with the Provost's decision. He also pointed out that the policy included appeals of the imposed sanctions.

**Prof. Richman** asked faculty members to provide further feedback to either Prof. Boudreau, Prof. Gaudette, or Prof. Richman, with the understanding that every effort would be made to incorporate all worthwhile suggestions before the December Faculty meeting.

#### Committee on Graduate Studies and Research (CGSR)

**Prof. Troy** (BME), for the Committee on Graduate Studies and Research (CGSR), moved that the guidelines for financial assistance to Teaching and Research Assistants, and Graduate Fellows, and Graduate Assistants described in the Financial Assistance section of the Graduate Catalog be modified as described in the meeting materials. She explained the modifications. (See **Addendum #2** on file with these minutes.) The purpose is to provide graduate students with certainty about their funding so they can plan for the immediate future. This includes providing an assurance to Ph.D. students who are making satisfactory progress that they will have a minimum level of funding, yet allowing flexibility for faculty members to offer only short-term funding. The language defines fellowships as full support for 12 months including nine tuition credits/semester, with responsibilities focused on research and with the specific expectations defined in the notice of award. Teaching assistantships are described as *almost always* for a full academic year, including stipend and full tuition, with teaching responsibilities specified. Research assistantships are typically for 9 or 12 months including a stipend and full tuition, with responsibilities defined by the supporting faculty member. For added flexibility, the position of Graduate Assistant would be created for students on a short-term basis who are otherwise not supported.

**Prof. Demetriou** (ME) asked if the proposed language can accommodate TA positions that open up for one semester only. **Prof. Troy** explained that such exceptions are included in the “almost always” description of TA positions as for a full academic year.

**Prof. Sunar** (ECE) asked what a faculty member could do under the proposed language if after just one semester a student is not performing as expected. **Dean Camesano** explained that this policy applies only to students making satisfactory student performance. Prof. Sunar was concerned because academic standards will differ between faculty members and the standard of satisfactory academic progress is vague. He did not want the language to force faculty members to support students who were not meeting their expectations

**Prof. Fehribach** (MA) was concerned that Fulbright fellowships, which are not focused on research, would not fall into the definition of fellowships in the proposed language. **Prof. Troy** pointed out that the language applies to WPI fellowships only.

**Prof. Dominko** (BBT) made a friendly amendment to modify the first line of the proposed text as follows (with inserted text underlined): “Financial assistance from WPI to support graduate students...” **Prof. Troy** accepted the friendly amendment.

**Prof. Gericke** (CBC) wanted to make sure that the proposed language referred not only to unsatisfactory academic progress but also to unsatisfactory performance of TA responsibilities. **Prof. Troy** explained that such expectations were included in the notice of award, but made the point that we need to give a student a fair chance to improve his or her teaching performance before the assistantship were withdrawn.

**Dean McGrade** (Grad. Enroll. Serv.) made a friendly amendment to modify the first line of the proposed text as follows (with inserted text underlined and deleted text ~~struckthrough~~): “Financial assistance from WPI to support graduate students is available in the form of teaching assistantships, research assistantships, other graduate assistantships, fellowships, and internships, ~~and loans~~. **Prof. Troy** accepted the amendment. In anticipation of possibly re-categorizing tuition stipends as scholarships under changing tax laws, Dean McGrade suggested including “scholarships” in the list of financial assistance that we offer. **Prof. Troy** preferred to wait until any new tax laws are established.

**Prof. Demetriou** (ME) wanted to make sure that funding could be withdrawn from a research assistant as soon as it is clear that he or she is not able to perform to expectations, especially when the duration of the supporting grant may be relatively short. **Prof. Troy** thought that concern was beyond the scope of the proposed policy.

**President Leshin** was concerned that the short-term nature of the graduate assistant appointments would make it possible to underfund such students. **Prof. Troy** explained that this funding was meant for students (typically self-funded master’s students) who would otherwise not be funded at all.

The motion **passed**.

#### 5. Announcements

**Dean Heinricher** (UGS) pointed out that there is an active Canvas site through which the COACHE survey results can be accessed, and that there is a working group that has begun to analyze the results with input from the faculty. He encouraged all faculty members to participate.

**Prof. Richman** encouraged all in attendance to stop at the Quorum to socialize after the meeting.

#### 6. Adjournment

Meeting adjourned at 4:30 pm.

**Addenda on file with these minutes:**

1. **Addendum #1 COG Presentation – Research Misconduct Policy – November 16 2017**
2. **Addendum #2 CGSR Presentation – Motion on Graduate Student Financial Awards - November 16 2017**

**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Governance (Prof. Gaudette, Chair)  
**Re:** Motion to adopt a new WPI Research Conduct Policy

**Motion:** On behalf of the Committee on Governance, I move that the proposed WPI Policy on Research Conduct (included as Attachment 1 of this motion) replace the current faculty-approved WPI Policy on Research Misconduct (in Part Two, Section 4.G of the Faculty Handbook, and included as Attachment 2 of this motion).

**Rationale:**

The purpose of this motion is to introduce a new WPI Research Conduct Policy that both would address certain technical issues related to federal regulations, and would reconcile the differences between the version of the policy approved by the Faculty in January 2014 and the version approved by the Executive Committee of the Board of Trustees in December 2013.

The technical issues addressed include the following:

- 1) The need for WPI to have a single Research Conduct Policy;
- 2) The need for the Research Misconduct Policy to apply to faculty, staff, and students;
- 3) The need to allow the Institution to take appropriate interim actions to protect public health, federal funds and equipment, and the integrity of the research process;
- 4) The need to conform to the accepted standard of proof for a finding of research misconduct;
- 5) The need to allow allegations of research misconduct to be raised by any means of communication;
- 6) The need to assure that investigators have no conflicts of interest with the Respondent, the Complainant, or the witnesses;
- 7) The need to be more explicit about the content, timing, and circumstances of required reporting.

The proposed WPI Research Conduct Policy (in Appendix 1) addresses all these technical issues.

The two main differences between the Faculty-approved and the Board-approved policies are as follows:

- a) In the faculty-approved policy, an Inquiry committee of three faculty members (appointed by the VPR) could dismiss the case without further consultation with the VPR if in their view there were no basis for the allegations of research misconduct. In the Board-approved policy, only the VPR (after consulting with an Inquiry committee of membership determined by the VPR) could dismiss the case at the Inquiry stage.
- b) In the faculty-approved policy, if at least four (out of five) members of the Investigation committee voted that the Respondent did not commit research misconduct, then the Provost could impose only a “minor” sanction. In the Board-approved policy, no such restriction was placed on the Provost.

The proposed WPI Research Conduct Policy (in Appendix 1) reconciles these differences in the following ways.

In the proposed version of the policy, the Provost serves as the single Deciding Official at both the Inquiry and Investigation stage. This formulation is consistent with the sample policy posted by U.S. Department of Health and Human Services Office of Research Integrity (ORI).

No longer would the Inquiry committee be permitted to dismiss a case on its own. But if the Provost were to decide to continue from the Inquiry to a formal Investigation, he or she would be required to send the Inquiry committee's report to ORI even if the Inquiry committee's recommendation were in disagreement. Moreover, if a majority of the Inquiry Committee voted not to proceed with an Investigation, but the Provost decided that there should be an Investigation, then the Provost would be required to state the basis for such decision in a document maintained with records relating to the Investigation.

No longer would a vote by at least four (out of five) members of the Investigation committee that the Respondent did not commit research misconduct, restrict the sanctions that the Provost could impose if he or she were to decide on a finding of research misconduct. But the Vice Provost for Research would be required to send the final report of the Investigation committee to ORI, even if the vote or the disciplinary action recommended by the Investigation Committee were in disagreement with the Provost. Moreover, if a majority of the Investigation Committee voted that the Respondent did not commit Research Misconduct but the Provost decides that the Respondent did, or if the Provost decides on a disciplinary action that is different than the action recommended by the Investigation Committee, then the Provost would be required to state the basis for such decisions in a document maintained with records relating to the investigation.

In addition, the processes for appeals have been expanded. The current policy allows *only* for appeal of revocation of tenure, and only directly to the Board.

In the proposed policy, the Respondent could appeal *any* sanction. For all sanctions except revocation of tenure, the appeal would be made to the President. For a sanction of revocation of tenure, the appeal mechanism would involve a new committee of five faculty members (appointed in a collaboration between the Secretary of the Faculty and the Chair of the Board) that would make its recommendation about the sanction to the Chair of the Board, who would make the final decision.

The proposed policy also provides the Respondent with the right to appeal any *finding* of research misconduct to the President in two instances: a) when there are alleged procedural violations that are substantial and material and which would have changed the outcome of the case; and b) when the Investigation Committee voted that the Respondent did not commit Research Misconduct but the Provost finds that Research Misconduct has occurred.



## Attachment 1 Proposed WPI Research Conduct Policy

(Note: *underline italics* denote text added to the draft policy discussed at the November 16, 2017 Faculty meeting; ~~strikethrough~~ fonts denote text deleted from the November draft; and - for simplicity - no tracking has been made to denote purely organizational changes to the November draft.)

### Introduction

*The integrity of the University and its academic endeavors require that teachers, researchers, advisors and other members of its community be dedicated to maintaining the highest ethical standards in their professional activities.* Unethical behavior in research and scholarship strikes at the heart of the scholarly and educational enterprise. A shared understanding of expectations and responsibilities is, therefore, critical — not only to the quality of the research enterprise but also to the collegial life of this community.

Supervisors must enforce the highest standards for conducting research and creating and maintaining records of the research. The risk of misconduct increases in an environment where there is a lack or deficiency of supervision. Specifically, faculty supervisors, principal investigators, laboratory and center directors and Department Heads, should clearly articulate standards and protocols for research, scholarship, and creative work, through discussion and review of research, and, when possible, with written guidelines and training that adhere to best practices.

*In recognition of the need to maintain the highest standards in research conduct,* WPI has developed the following policy to respond to allegations of research misconduct<sup>1</sup> and to inform members of the community of the appropriate channels for bringing such matters to the attention of the University.<sup>2</sup> This policy applies to Research Activities conducted at WPI or by WPI faculty, staff, fellows, students.

The appropriate institutional response to research misconduct will vary with the facts and circumstances of each case. In addition to requiring correction of the research record, WPI has recourse to a variety of disciplinary actions against individuals whose conduct violates this policy, including, in severe cases and following applicable procedures, expulsion of a student, termination of an employee, or revocation of tenure.

The procedures described in this policy are consistent with requirements that apply to the review and reporting of allegations of research misconduct arising in the context of certain federally sponsored research. This Policy should be reviewed and updated periodically in order to ensure compliance with applicable legal requirements.

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<sup>1</sup> This policy is based upon the federal regulations governing research misconduct in connection with United States Public Health Service (“PHS”)-supported activities and will be interpreted and applied so as to be in compliance with those regulations. WPI has also determined that this policy will be applied as the minimum standard to all allegations of research misconduct, regardless of the funding source(s) or whether the scholarly activity is funded. Institutional response to research misconduct allegations in areas not PHS-supported will follow the same general principles except for the actual involvement of PHS. In the event another research sponsor has additional requirements beyond those covered by this policy, all research funded by that source will be subject to those additional requirements.

<sup>2</sup> This policy replaces the prior policy entitled “Policy and Procedure for Removal of Tenured Faculty Member for Cause” adopted in 1969 as it relates to matters concerning research misconduct. This policy also replaces the Research Misconduct Policy passed by the Board of Trustees on December 13, 2013 and the Research Misconduct Policy passed by the Faculty on January 23, 2014.

## **Students**

If a student is involved in the review of an allegation of Research Misconduct (whether as a Complainant, as a Respondent, or as a person from whom information about allegations is obtained), fact finders and investigators must seek guidance from the Office of the Vice Provost for Research regarding the legal and policy requirements that may apply.

Except as they may be subject to the requirements of grants, sponsored research or research funded by a governmental authority, allegations of Research Misconduct committed by students will be addressed in accordance with provisions of the Student Code of Conduct dealing with Student Academic Dishonesty.

## **Definitions**

**Research Activities** are proposing, conducting, *processing*, reviewing, or reporting the results of research or other scholarly inquiry.

**Research Misconduct** is Fabrication, Falsification, or Plagiarism in Research Activities or Deliberate Interference. It does not include honest error or differences of opinion.

- ***Fabrication*** is making up data or results and recording or reporting them.
- ***Falsification*** is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the Research Record.
  - ***Research Record*** is the record of data or results that embody the facts resulting from scientific or other scholarly inquiry and includes, but is not limited to, research proposals, laboratory records (both physical and electronic), progress reports, abstracts, theses, oral presentations, internal reports, and journal articles.
- ***Plagiarism*** is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
- ***Deliberate Interference*** is intentionally causing material harm to the research or scholarly work of others, and may include damaging or destroying the property of others, such as research equipment or supplies; disrupting active experiments; or altering or deleting products of research, including data *and program codes*.

**Complainant** is an individual who reports allegations of **Research Misconduct**.

**Respondent** is an individual who is the subject of allegations of **Research Misconduct** at WPI.

**WPI Advisor** is a WPI community member of the Respondent's choice, not the Respondent's family member or subordinate, who may participate and provide support to a Respondent in any meeting in connection with a review under this Policy. The role of the WPI Advisor is to provide support and guidance, not to be a substitute for the Respondent, who is the primary participant.

**Preponderance of the Evidence** is proof by information that, compared with the information opposing it, leads to a conclusion that the fact at issue is more probably true than not.

*Impartial and Unbiased Persons are those who do not have unresolved personal, professional, or financial conflicts of interest with those involved with the inquiry or investigation.*

## **Duty to Report**

Each member of the WPI community has a responsibility to report any conduct that they believe in good faith to be Research Misconduct at WPI. There may be circumstances in which, prior to taking that action, it would be appropriate for the Complainant to discuss any concerns with the prospective Respondent.

Consultation and guidance is always available from the Vice Provost for Research or from senior academic officers (e.g. Deans, Department Heads, laboratory Directors), who themselves are bound by a Duty to Report.

All allegations of Research Misconduct, wherever initially received, must be conveyed promptly to the Vice Provost for Research. A supervisor who becomes aware of possible Research Misconduct, either from the supervisor's own observations or because of reports, has a responsibility to bring allegations of Research Misconduct directly to the Vice Provost for Research in order to ensure that proper procedures are followed.

If a supervisor feels that the Vice Provost for Research is not the appropriate official to whom to report allegations in a particular case, the allegations may be reported to the Provost. If a Complainant reports allegations to a supervisor and the supervisor fails to forward the allegations to the Office of the Vice Provost for Research or the Provost, then the Complainant should report the allegations to the Vice Provost for Research or the Provost directly.

### **Standard of Proof for a Finding of Research Misconduct**

In order to enter a finding of Research Misconduct, WPI must determine by a preponderance of the evidence that:

- the Respondent engaged in Research Misconduct; and
- the Research Misconduct marked a significant departure from accepted practices of the relevant academic community; and
- the Respondent committed the Research Misconduct intentionally, knowingly, or recklessly.

### **The Assessment and Review Process**

#### **Initial Assessment:**

Upon receipt of an allegation of Research Misconduct, within 5 *business* days the Vice Provost for Research will conduct an initial assessment of the allegations, to determine whether the alleged misconduct falls within the scope of this Policy. The Vice Provost for Research may appoint an impartial fact finder with appropriate expertise to conduct this initial assessment and to make a recommendation to the Vice Provost for Research.

If the Vice Provost for Research determines that the allegations do not fall within this Policy, the Vice Provost for Research will either close the matter or refer it to another office at WPI with authority or responsibility over the matter.

If the Vice Provost for Research determines that the allegations do fall within this Policy, the Vice Provost for Research will initiate a two-stage review process under this Policy. The decision of the Vice Provost for Research to initiate or not to initiate a review is final.

#### **Subsequent Two-Stage Review Process:**

- The *first stage of review* (the "Inquiry") under this Policy consists of preliminary fact-finding stage to decide whether to recommend to the Provost a further, formal review. *The Inquiry should begin within 30 days after the Vice Provost for Research's initial assessment of the allegations. Once initiated, the Inquiry normally must be completed within 60 calendar days.*
- If after the Inquiry, there is a decision *by the Provost* to initiate a further review, WPI will proceed to a *second stage of review* (the "Investigation"), which entails a formal review leading to a recommendation *to the Provost* whether or not WPI should make a finding of Research Misconduct ~~in violation of this Policy~~ *and, if so, what the appropriate sanction should be. If a formal*

investigation is warranted, it shall begin within 21 days of the conclusion of the Inquiry, and it is normally to be completed within 120 days once it has begun.

Interim Institutional Actions:

At any point in the process, The Vice Provost for Research may institute appropriate interim institutional actions to protect the community, public health, federal or other governmental funds and equipment, and the integrity of the Public Health Services (PHS) supported research process. For such actions, the Vice Provost for Research should state the basis for such decision in a document maintained with records relating to the case and provided to the Respondent.

**First Stage of Review: Inquiry**

The Inquiry consists of information gathering and fact-finding to determine as a preliminary matter whether an allegation of Research Misconduct warrants further, formal review. The Inquiry should begin within 30 days, if called for, after the Vice Provost for Research's initial assessment of the allegations.

The Vice Provost for Research will appoint three impartial fact finders to conduct the Inquiry. If necessary, fact finders may be found from outside the WPI community. At this time, the Vice Provost for Research will provide written notice to the Respondent that an Inquiry has been initiated. The written notice ordinarily summarizes the allegations under review and advises the Respondent of the right to select a WPI Advisor to support the Respondent in the course of the proceedings. The Respondent will be given an opportunity to respond, in writing, to the Vice Provost for Research within 10 days following the Respondent's receipt of the allegation. The Respondent may, in lieu of a WPI Advisor, have legal counsel for assistance or support during the Inquiry stage of the process.

Either before or when the Respondent is notified, the Office of the Vice Provost for Research will promptly take all reasonable and practical steps to obtain custody of all the records and other evidence needed to conduct proceedings under this Policy and will sequester them in a secure manner. The Office of the Vice Provost for Research will provide Respondent with reasonable, supervised access to the records or, when appropriate, copies of the records. The Office of the Vice Provost for Research may seek additional records or other materials that may be potentially relevant during the course of the review.

Oversight for the Inquiry process will be provided by the Office of the Vice Provost for Research. The Inquiry should, to the extent reasonably possible, be limited to a review of documentary materials, including the Respondent's written response to the allegations. The fact that an Inquiry has been initiated should be made known only to the Respondent and other persons with a need to know.

At the conclusion of the Inquiry, the ~~fact-finding~~ Inquiry Committee will prepare a draft written report summarizing the process and information reviewed and recommending whether to proceed with an Investigation. The draft Inquiry report should identify the name and position of the Respondent, a description of the allegations, the PHS support (if any), including the specific grant or contract, and should explain why the allegations do or do not warrant an investigation.

A recommendation to proceed should be based on whether there are reasonable grounds to conclude that the allegations may have substance and that Research Misconduct may have occurred based on the information reviewed. In either case, the Respondent will be given a copy of the draft Inquiry report and an opportunity to respond within a reasonable time period set by the Vice Provost for Research. Such response will be reviewed by the ~~fact-finding~~ Inquiry Committee before finalizing the Inquiry report. In addition, any comments provided by the Respondent will be included as an appendix to the final Inquiry report. The final Inquiry report should state the number (but not the names) of the members of the Inquiry Committee who voted that an allegation warrants further review. The final Inquiry report will be forwarded to the Vice Provost for Research.

The Vice Provost for Research will review the Inquiry report and may ask the fact-finding committee for additional review or explanation. If this additional review by the fact-finding committee results in revisions to the report, the Respondent will have a further opportunity to submit written comments before any supplemental final Inquiry report is resubmitted to the Vice Provost for Research.

The Vice Provost for Research will submit a final Inquiry report to the Provost along with a written recommendation whether or not to proceed with an Investigation. The Provost will then decide whether or not to proceed with an Investigation. Before the Provost decides to proceed with an investigation, the Provost shall consult with the fact-finding committee and with the Secretary of the Faculty. If a majority of the Inquiry Committee voted not to proceed with an Investigation, but the Provost decides that there should be an Investigation, then the Provost should state the basis for such decision in a document maintained with records relating to the Investigation.

Following these consultations, the Vice Provost for Research will send written notice to the Respondent of the Provost's decision whether or not to proceed with an Investigation. The Complainant, if known, will be informed whether an Investigation will or will not be initiated.

The Inquiry, including preparation of the final Inquiry Report and the decision of the Provost on whether an investigation is warranted, must be completed within 60 calendar days of initiation of the Inquiry, unless the Vice Provost for Research determines that circumstances clearly warrant a longer period. If the Vice Provost for Research approves an extension, the inquiry record must include documentation of the reasons for exceeding the 60 day period.

Within 30 days of a finding by the Provost that an investigation is warranted, the Provost shall provide ORI (and any other funding agency or authority required to be notified) with a copy of the Inquiry report, *regardless of the vote of the Inquiry Committee.*

### **Second Stage of Review: Investigation**

If a formal investigation is warranted, it shall begin within 21 days of the conclusion of the Inquiry. The Vice Provost for Research initiates the Investigation by requesting the Secretary of the Faculty (SOF) and the Chair of the Faculty Review Committee (FRC) to appoint a five member investigation committee ("the Committee") to be selected from elected FRC members who have the expertise to evaluate the particular issues and evidence involved in the alleged misconduct. The faculty members must be unbiased toward the Complainant, Respondent and witnesses. (If there are not five unbiased elected FRC members with the required expertise, then the SOF and FRC chair will appoint the required number of qualified faculty from outside the FRC. If the Respondent or Complainant is either the SOF or FRC Chair, then the other will appoint the Committee.) The Committee shall elect its own Chair who shall be responsible for determining the manner in which the witness interviews and other procedures will be conducted by the Committee.

The Vice Provost for Research will provide written notice to the Respondent that the Investigation has been initiated. The written notice will:

- summarize the allegations;
- advise the Respondent of the Respondent's right to the support of a WPI Advisor or legal counsel in the Investigation; and
- identify the members of the investigation Committee.

The Respondent may challenge the composition of the Committee, if s/he believes that one or more of its members is biased. The remaining members of the Committee shall determine whether bias exists and otherwise act to ensure its own credibility. The Committee shall request that the Chair of the FRC and the Secretary of the Faculty replace a committee member when appropriate.

The Investigation consists of a formal examination and evaluation of all relevant information to determine if Research Misconduct occurred. The Investigation will typically include an examination of all relevant documentation and interviews of individuals who may have relevant information about the research in question. The Investigation Committee may review the Inquiry findings but is not bound by the findings of the Inquiry.

Oversight of the Investigation and specific guidance as it proceeds will be provided by the Office of the Vice Provost for Research.

As the Investigation proceeds, the Office of the Vice Provost for Research should provide the Respondent with reasonable updates and opportunities to respond to information obtained in the investigation.

Throughout the Committee Investigation process, the Respondent is entitled to the presumption of innocence, and:

- shall have the opportunity to respond to allegations of Research Misconduct;
- shall have the opportunity to present a defense;
- shall have the opportunity to offer witnesses to be interviewed by the Committee; and
- may, in lieu of a WPI Advisor, have legal counsel for assistance or support.

Once the Investigation is completed, the Committee will prepare a draft written report offering a judgment based on the evidence as to whether the Respondent has committed Research Misconduct, and if so, its level of severity. If the Committee determines Respondent has committed Research Misconduct, it shall also recommend disciplinary action. The report should summarize the facts and analysis that support those conclusions, addressing the merits of any reasonable explanation or defense provided by the Respondent, and including the *numerical* vote of the Committee without identifying individual votes.

The Respondent will be provided with a copy of the draft Investigation report with an opportunity to respond within a reasonable time period set by the Vice Provost for Research. Such response will be considered reviewed by the Committee before the Committee takes a final vote, makes its final recommendation for disciplinary action, and issues its final Investigation report. In addition, any comments provided by the Respondent will be included as an appendix to the final Investigation report. The final Investigation report will be forwarded to the Vice Provost for Research.

The Vice Provost for Research will review the Investigation report and may ask the Investigation Committee for additional review or explanation. If this results in revisions to the report, the Respondent will have a further opportunity to submit written comments before any supplemental final Investigation report is resubmitted to the Vice Provost for Research.

The Vice Provost for Research will submit the final Investigation report to the Provost and the Respondent along with a written recommendation whether or not WPI should make a finding of Research Misconduct. If the Vice Provost for Research recommends a finding of Research Misconduct, he or she will also recommend disciplinary actions to be taken. Before the Provost makes a finding of Research Misconduct, the Provost shall consult with the Committee and with the Secretary of the Faculty.

If the Provost finds that Research Misconduct has been committed, the Provost shall decide on appropriate disciplinary actions, which may include, but are not limited to, formal reprimand, suspension, expulsion, revocation of degree, change in WPI status, revocation of tenure and termination of employment. If a majority of the Investigation Committee voted that the Respondent did not commit Research Misconduct but the Provost decides that the Respondent did, or if the Provost decides on a disciplinary action that is different than the action recommended by the Investigation Committee, then the

Provost should state the basis for such decisions in a document maintained with records relating to the investigation.

The Vice Provost for Research will provide written notice of the Provost's decision to the Respondent. The Complainant, if known, will be informed whether there was a finding of Research Misconduct. However, WPI officials will not notify the Complainant of any disciplinary action taken. The Vice Provost for Research will send the final report to ORI (and any other funding agency or authority required to be notified), regardless of the vote or the disciplinary action recommended by the Investigation Committee.

The Investigation is to be completed within 120 days of beginning it, including conducting the Investigation, preparing the report of findings, providing the draft report for comment and sending the final report to ORI. However, if the Vice Provost for Research determines that the Investigation will not be completed within this 120-day period, the Vice Provost for Research will submit to ORI a written request for an extension, setting forth the reasons for the delay.

### **Appeals**

The Respondent may appeal any finding of Research Misconduct, and any sanction other than termination of employment or revocation of tenure to the President within two weeks after the Provost notifies the Respondent of the imposition of the sanction. The grounds of any appeal of a finding of Research Misconduct shall be limited to two instances:

- a) when there are alleged procedural violations that are substantial and material and which would have changed the outcome of the case; and
- b) when the Investigation Committee voted that the Respondent did not commit Research Misconduct but the Provost finds that Research Misconduct has occurred.

Before the President decides the appeal, the President shall consult with the Provost and the Secretary of the Faculty. The President should issue a decision within thirty days of receiving the appeal. The President's decision shall be final.

If the Provost imposes a sanction of termination of employment or revocation of tenure, the Respondent may appeal the sanction to the Board of Trustees within two weeks after the Provost notifies the Respondent of the imposition of the sanction (or within two weeks after the President decides an appeal of a finding of Research Misconduct based on grounds a) or b) described above. If the Respondent appeals to the Board, the Chair of the Board, in collaboration with the Secretary of the Faculty, shall appoint a committee of five faculty members who will make a recommendation regarding the sanction imposed by the Provost. The faculty committee will have access to all written reports and materials relevant to the case. The faculty committee will summarize the basis for its recommendation in a written report to the Board Chair within thirty days. The Board Chair should issue a written decision within thirty days of receiving the faculty committee's report. The Board Chair's decision shall be final.

Other than interim institutional actions which may already be in effect, any finding of Research Misconduct, and the imposition of any sanction imposed by the Provost, will be stayed while an appeal is pending before the President or the Board of Trustees.

### **Special Measures**

The Provost has the authority to mitigate the effects of the misconduct, including withdrawing WPI's name and sponsorship from pending abstracts and papers, notifying individuals known to have relied upon research that was affected by the misconduct, and taking formal steps to correct or retract publications and the Research Record.

If there is no finding of Research Misconduct, all reasonable and practical efforts *if requested and as appropriate*, should be made to *protect and* restore ~~and protect~~ the reputation of the Respondent. All reasonable and practical efforts should be made to protect or restore the position and reputation of any complainant, witness or committee member *and to counter potential or actual retaliation against these individuals*.

### **Provisions Common to Misconduct Review Process**

#### **No Conflicts of Interest**

To the *maximum* extent ~~reasonably feasible~~ *practicable*, ~~the Vice Provost for Research~~ *steps should be taken to should* ensure *an impartial and unbiased process, including participation of persons (including ~~that~~ fact-finders and investigators) who:* (1) have sufficient expertise to carry out a thorough evaluation of the relevant information; and (2) have no real or perceived *unresolved personal, professional, or financial* conflicts of interest *with those involved with the inquiry or investigation* that could affect their ability to be objective reviewers.

In cases where the Provost has a conflict of interest, the President shall serve in the Provost's role. In cases where the Vice Provost for Research has a conflict of interest, the Provost will serve in that role. *In cases where allegations of Research Misconduct have been brought against the Vice Provost for Research, the Provost or the President, then the process outlined in this policy will be adjusted accordingly to avoid any conflicts of interest. The President shall resolve any questions of bias or conflict of interest. The President's decision on such questions shall be final.*

#### **Confidentiality**

Proceedings concerning Research Misconduct often raise difficult issues for those making the allegations, for those who are the subject of the allegations, and for those responsible for reviewing the allegations. Review of the allegations should therefore be conducted promptly and with care and sensitivity.

All participants in the review process under this Policy are expected to maintain confidentiality to protect the privacy of all involved, to the extent possible and as permitted by law. Participants should keep in mind the effect that allegations can have on reputations, even if the allegations are not sustained by the proceedings. Thus, only those people with a need to know should be informed of a complaint.

#### **No Retaliation**

No one shall be retaliated against for participating in a review of a misconduct allegation in good faith as a Complainant, a witness, a factfinder, or investigator or in any other capacity. Reasonable efforts should be made to counter potential or actual retaliation against these complainants, witnesses and committee members. Retaliation is typically a significant adverse action taken against an individual because the individual participated in a review process. Retaliation is a serious offense. A complaint of retaliation may be investigated and may lead to disciplinary action, up to and including terminating the individual's relationship with WPI.

#### **False Accusations or Testimony**

A false or unfounded report of misconduct determined by the Institute to have been made in bad faith and dishonesty in the context of an Inquiry or Investigation are serious offenses. Such offenses may themselves be investigated and may lead to disciplinary action, up to and including termination of employment or other affiliation with WPI.

#### **Duty to Cooperate and Preserve and Produce Information**



All members of the WPI community must cooperate with efforts to review allegations of Research Misconduct.

While the destruction or absence of, or failure to provide upon request, information relating to allegations of Research Misconduct is not misconduct per se, such failure may be considered to be evidence supporting a finding of Research Misconduct when the evidence shows the Respondent had relevant information and intentionally, knowingly, or recklessly destroyed it; had the opportunity to maintain the information but did not do so; or maintained the information and failed to produce it in a timely manner in connection with a Research Misconduct proceeding, with the result that the Respondent significantly departed from accepted practices of the relevant academic community.

**Record Keeping**

The Office of the Vice Provost for Research is the custodian of records relating to proceedings under this Policy.

**Notice to Sponsors**

To the extent a sponsor requires notification from WPI that research it funded has become the subject of proceedings under this Policy, the Vice Provost for Research will supply that notification. In addition, the Vice Provost for Research will give applicable sponsors written notice of any decision of the Provost entering a finding of Research Misconduct at WPI.

## Attachment 2 **WPI Policy on Research Conduct**

(From the current Faculty Handbook: Part Two, Section 4.G)  
(Approved by the Faculty, January 23, 2014)

### **1. Introduction and Applicability**

The integrity of the University and its academic endeavors require that teachers, researchers, advisors and other members of its community be dedicated to maintaining the highest ethical standards in their professional activities. In recognition of this need, WPI has developed the following policy to respond to allegations of research misconduct<sup>3</sup> and to inform members of the community of the appropriate channels for bringing such matters to the attention of the University.<sup>4</sup> This policy applies to tenured, tenure-track, and continuing non-tenure track members of the WPI faculty.

### **2. Definitions**

*Complainant.* The individual, department or entity bringing forth an allegation of research misconduct.

*Respondent.* The individual against whom an allegation of research misconduct is made.

*Research misconduct*<sup>5</sup> is defined as knowing, intentional or reckless fabrication, falsification, or plagiarism in the conduct of scholarly activity. Research misconduct also includes the failure to follow standards of professional conduct with regard to human or animal subjects. Research misconduct does not include honest error or differences of opinion.

- i. *Fabrication* is inventing data or results and recording or reporting them.
- ii. *Falsification* is manipulating research results, equipment, or processes, or changing or omitting data or results such that information is not accurately represented in the research record. The research record is the record of data or results of scholarly activity and includes, but is not limited to, research proposals, laboratory records (both physical and electronic), progress reports, abstracts, theses, oral presentations, internal reports, and materials submitted for publication or published in any form.
- iii. *Plagiarism* is the appropriation of another person's ideas, processes, results, data or words without giving appropriate credit.
- iv. *Scholarly activity* includes, but is not limited to, writing research proposals, undertaking research activities, and reporting or presenting research results. Scholarly activity includes all basic, applied, and demonstration research in all fields of study. Scholarly activity also includes reviewing the research of others for publishers, funding agencies or any other purpose.

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<sup>3</sup> This policy is based upon the federal regulations governing research misconduct in connection with Public Health Service ("PHS")-supported activities and will be interpreted and applied so as to be in compliance with those regulations. WPI has also determined that this policy will be applied as the minimum standard to all allegations of research misconduct, regardless of the funding source(s) or whether the scholarly activity is funded. Institutional response to research misconduct allegations in areas not PHS-supported will follow the same general principles except for the actual involvement of PHS. In the event another research sponsor has additional requirements beyond those covered by this policy, all research funded by that source will be subject to those additional requirements.

<sup>4</sup> This policy replaces the prior policy entitled "Policy and Procedure for Removal of Tenured Faculty Member for Cause" adopted in 1969 as it relates to matters concerning research misconduct.

<sup>5</sup> Definitions relating to research misconduct are based on the Federal Policy on Research Misconduct, 42 C.F.R. Part 93.

### **3. Sanctions**

It is not feasible or wise to automatically assign a specific sanction to particular research misconduct. Generally, sanctions should be commensurate with the seriousness of the research misconduct or cause. Seriousness, and thus the sanction, may be affected by the persistence of behavior in the face of prior warnings, counseling, or sanction as well as the egregiousness of a particular action. Disciplinary actions fall into two categories:

Major sanctions include, but are not limited to, dismissal and/or removal of tenure, suspension without pay, reduction in academic rank, and public censure. A major sanction may not be imposed without following the investigatory process outlined below.

Minor sanctions are penalties less serious than a major sanction and include, but are not limited to, verbal or written reprimand, denial of eligibility for merit salary increase, and suspension with pay. Minor sanctions may be imposed administratively.

Should the Respondent disagree with an imposed minor sanction, the Respondent can request in writing a full inquiry within 5 business days of being notified of the minor sanction.

### **4. Initial Inquiry**

- a. In all situations, complaints or allegations of research misconduct should be made in writing to the Vice Provost for Research.<sup>6,7</sup>
- b. Complaints or allegations of research misconduct are not subject to investigation if the alleged misconduct occurred more than six years prior to the date the allegation or complaint was received by the Vice Provost for Research. However, an exception to this limitation is made (a) if the Respondent republishes, cites or otherwise uses falsified, fabricated or plagiarized data or information within the six year limitation period, in which case the limitation period begins at the time of republication or other use; or (b) if the health or safety of the public is in jeopardy, in which case there is no time limit.
- c. Within five business days of receiving an allegation of research misconduct, the Vice Provost for Research will determine whether the behavior alleged meets the definition of research misconduct above and is sufficiently credible and specific so that potential evidence of such misconduct may be identified. If the behavior meets the definition of misconduct and the allegation is sufficiently credible and specific the VPR shall forward a copy of the complaint or allegation to the person named therein (“Respondent”) along with a copy of this policy. The Vice Provost for Research shall, at the same time, forward a copy of the allegation to the Respondent’s department head or other immediate supervisor and immediately arrange to take all appropriate actions to obtain and secure all research records and evidence needed to conduct the research misconduct proceeding. Respondent shall have an opportunity to respond in writing to the Vice Provost for Research to any allegations raised. Responses must be received by the Vice Provost for Research within ten business days following the Respondent’s receipt of the allegation. Upon reasonable request, the Vice Provost for Research may choose to grant additional time. After considering the information provided by the Respondent, the VPR will reassess the credibility of the allegation. If the behavior meets the definition of misconduct and the allegation is sufficiently credible and specific an inquiry will be conducted. Otherwise the VPR will notify the Respondent in writing that the matter is dismissed.

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<sup>6</sup> If the Complainant is the Vice Provost for Research or the Provost, the Secretary of the Faculty shall perform the role of the Vice Provost for Research in the initial inquiry.

<sup>7</sup> If the Respondent is the Vice Provost for Research or Provost then the President shall perform the role of the Vice Provost for Research in the initial inquiry.

At any time, the Respondent may meet with the Vice Provost for Research and Provost to mutually resolve the issues raised by the complaint or allegation. If the parties cannot agree on a settlement of the issues, the proceedings outlined in this policy shall continue.<sup>8</sup>

- d. If the VPR determines that an initial inquiry will be performed, then the VPR, in consultation with the department Head and, if the VPR deems appropriate, the Director of Research Administration, and/or such other persons as the VPR decides would be helpful to the inquiry process shall form a committee of three tenured faculty members. This “Inquiry Committee” will undertake an initial review of the evidence and may interview Respondent, complainant and other relevant witnesses, all on an individual basis.
  - i. During the inquiry period, the identities of all parties involved will be held in confidence to the maximum extent that an effective inquiry allows.
  - ii. The entire inquiry process must be completed within sixty calendar days of the formation of the Inquiry Committee, unless the Vice Provost for Research determines, for good cause shown and documented on the record, that circumstances warrant a longer period.
  - iii. The Vice Provost for Research shall, at any appropriate time and when required by law, notify federal authorities of allegations of research misconduct in federally supported research.<sup>9</sup>
- e. Based on the information gathered, the Inquiry Committee shall prepare a written preliminary report. The Vice Provost for Research and Respondent shall be provided a copy of the preliminary report. The Respondent will be provided an opportunity to respond or comment within ten business days.<sup>10</sup>

After evaluating all of the information, the Inquiry Committee shall determine if there is substance to the complaint or allegations of research misconduct and prepare a final report that includes any comments provided by the Respondent.<sup>11</sup> The final report will be delivered to the Respondent, the Vice Provost for Research, and the Provost.
- f. If the Inquiry Committee determines that there is not substance to the allegations, then the Provost will notify the Respondent in writing that the matter is dismissed.
- g. If the Inquiry Committee determines that there is substance to the allegations of misconduct and the Provost decides that major sanctions are not supported, then minor sanctions may be imposed administratively after first providing the Respondent an opportunity to respond to the Provost. In this case, the Provost will determine the appropriate minor sanction only after reviewing and considering the response received from Respondent. Should the Respondent disagree with an imposed minor sanction, the Respondent can request in writing a formal investigation within 5 business days of being notified of the minor sanction.

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<sup>8</sup> If PHS-supported research is at issue, the Vice Provost of Research must notify the ORI, if WPI intends to close a case at the inquiry, investigation or appeal stage on the basis that Respondent has admitted guilt or a settlement with Respondent has been reached (42 C.F.R. § 93.316).

<sup>9</sup> Regulations require institutions receiving grants under the Public Health Service to notify the Office of Research Integrity (“ORI”), a component of the Office of the Director of the National Institutes for Health (“NIH”), when an institution determines that a formal investigation is warranted (42 C.F.R. § 93.309) and certain specific conditions exist (see 42 C.F.R. § 93.318). If it is determined that an investigation is not warranted, the institution must maintain, for a period of at least seven (7) years, sufficiently detailed documentation of the inquiry to permit a later assessment of reasons supporting that determination (42 C.F.R. § 93.309(c)).

<sup>10</sup> Inquiry reports involving PHS-supported research must comply with Federal Regulations. See 42 C.F.R. § 93.309.

<sup>11</sup> Inquiry reports involving PHS-supported research must comply with Federal Regulations. See 42 C.F.R. § 93.309.

- h. If the Inquiry Committee determines that there is substance to the allegations of misconduct and the Provost determines that major sanctions might be appropriate then a formal investigation is warranted.
- i. No action shall be taken against the Respondent as a result of research misconduct allegations prior to the conclusion of the appropriate investigation, unless it is determined that the presence of that person on campus or in class poses an immediate threat of physical or psychological harm to others. A suspension on this basis shall not result in a reduction of salary while an investigation is pending.

## **5. Procedures for Formal Investigations**

- a. If a formal investigation is warranted, it shall begin within twenty-one (21) days of the conclusion of the initial inquiry. Before the investigation begins, the Provost shall notify the Respondent and Vice Provost for Research in writing that a formal investigation is in order. When the complaint or allegation involves externally funded research, the Vice Provost for Research will inform the sponsor of the formal investigation.<sup>12</sup>
- b. All parties involved in a formal investigation and any subsequent proceedings shall, to the extent possible, endeavor to maintain confidentiality regarding the allegations, evidence and proceedings, and use care in balancing the need for disclosure and the privacy interests of persons involved.
- c. The Provost will request the Secretary of the Faculty (SOF) and Chair of the Faculty Review Committee (FRC) to appoint a fact-finding committee (“the Committee”) of five elected FRC members who are unbiased<sup>13</sup> in the investigation and have the required expertise to evaluate the particular issues and evidence involved in the alleged misconduct. (If there are not five unbiased elected FRC members with the required expertise, then the SOF and FRC chair will appoint the required number of qualified faculty from outside the FRC. If the Respondent or Complainant is either the SOF or FRC Chair, then the other will appoint the committee.) The Committee shall elect its own chair who shall be responsible for determining the manner in which the witness interviews and other procedures will be conducted by the Committee. The investigation will be completed within 120 days of the Committee’s formation, subject to external factors such as the availability of the parties, Committee members, witnesses and other evidence, and whether proceedings concerning the same allegations are pending in another forum. The VPR may determine that the investigation cannot be completed within this 120-day period and will so notify the granting agency if necessary.
- d. The Committee will be provided with all necessary information about the complaint or allegation and empowered to review relevant documents and interview witnesses. The Committee shall review all relevant research records and documentation and interview Respondent, complainant and any other available persons who have been identified as having relevant and material information regarding the investigation. The Committee may seek assistance from WPI counsel in conducting its investigation and from ORI, if needed.
- e. The Committee will pursue all significant issues and leads developed during the investigation, including evidence of additional instances of possible research misconduct. The Committee will give Respondent written notice of new allegations of research misconduct not addressed during

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<sup>12</sup> If the Complainant or Respondent is the Vice Provost for Research or Provost, the President shall perform the roles of the Provost and VPR in the formal investigation.

<sup>13</sup> “Unbiased” in this context means person(s) “who do not have unresolved personal, professional or financial conflicts of interest with” Respondent (42 C.F.R. § 93.310(b)).

- the inquiry or in the initial notice of investigation within a reasonable amount of time of deciding to pursue such allegations.
- f. The Committee will maintain records of its fact-finding proceedings, including copies of materials submitted by all parties, documentary evidence considered by the Committee, and a written record or summary of its witness interviews.
  - g. Respondent may exercise the following rights during the investigation of the Committee:
    - 1. Respondent may have an advisor or legal counsel to assist or support them through the Committee investigation process.
    - 2. Respondent may challenge the composition of the Committee, if s/he believes that one or more of its members is biased (see footnote 6). The remaining members of the Committee shall determine whether bias exists and otherwise act to ensure its own credibility. The Committee shall request that the Chair of the FRC and the Secretary of the Faculty replace a committee member when appropriate.
    - 3. At the request of Respondent, the Committee shall use its authority to obtain documents and evidence and to interview witnesses who have information relevant to the defense of Respondent.
    - 4. Respondent is entitled to a presumption of innocence and need not prove his or her innocence<sup>14</sup> to the Committee and to the Provost.
    - 5. Respondent shall have the opportunity to present a defense to the Committee, to present witnesses for interview by the Committee, and to respond to all allegations of research misconduct.
    - 6. Respondent shall receive a copy of the draft report of the Committee and shall have an opportunity to provide a written response to such report. Respondent shall receive a copy of the final report at the time it is provided to the Provost.
  - h. Once the investigation is completed, the Committee will prepare a written investigation report<sup>15</sup> (the “Report”) offering a judgment based on the evidence provided as to whether the Respondent has committed research misconduct, and if so its level of severity, and summarizing the facts and analysis that support that conclusion, addressing the merits of any reasonable explanation or defense provided by Respondent, and including the vote of the Committee. Findings of research misconduct shall only be made if a majority of the members of the Committee agree that such findings are supported by a preponderance of evidence<sup>16</sup>. If the Committee determines Respondent is guilty of research misconduct, it shall also recommend disciplinary action. If the disciplinary action includes termination and/or removal of tenure, it must be by agreement of four or more of the Committee members. The Report should normally be prepared within fifteen (15) days of conclusion of the evidentiary phase of the investigation.

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<sup>14</sup> The Respondent does bear the burden of proving any affirmative defenses raised (e.g., honest error or difference of opinion) or mitigating factors. (See 42 C.F.R. § 93.106.)

<sup>15</sup> If applicable, the investigation report shall comply with the requirements of 42 C.F.R. § 93.313.

<sup>16</sup> “Preponderance of the evidence” as applied to the Committee’s and Respondent’s (defense’s) burdens of proof means, “proof by information that, compared with that opposing it, leads to the conclusion that the fact at issue is more probably true than not.” (42 C.F.R. § 93.219.)

## **6. Final Findings**

- a. The Committee will provide Respondent with a draft copy of the Report prior to the time it is presented to the Provost.<sup>17</sup> Within 15 days of receipt of the Report, the Respondent may file an appeal or objection to the Report. Such appeals or objections must be in writing and state the reasons therefor. The Committee will prepare a Final Report that considers and includes the appeal(s) or objection(s) and any changes in the Committee's vote, finding, and recommendation.
- b. The Committee shall transmit the Final Report to the Provost and to the Respondent. The action of the Committee shall either be sustained by the Provost or the case returned to the Committee with the Provost's objections specified in writing. If the case is returned, the Committee shall reconsider, taking account of the stated objections and receiving new evidence as necessary. The Committee shall frame its reconsideration and communicate it in the same manner as before, including any change in the Committee's vote, finding, and recommendation. Only after study of the new report, and after consultation with the VPR and Department Head, should the Provost make a final decision.
- c. If at least four members of the committee voted that the respondent did not commit research misconduct, but the Provost decides on a finding of a guilt, then at most a minor sanction may be imposed.
- d. If the Provost decides that termination and/or removal of tenure is appropriate, but if four members of the Committee do not support the decision, then both the Provost's written recommendation and the Committee's report will be submitted to the Board of Trustees for its decision. In this case, the Board will provide both the Respondent and the Complainant with 10 days to submit any additional relevant information. The Board will then review all materials received and any other relevant material submissions or information which the Board, in its discretion, may solicit from the Respondent or Complainant, or the Provost. The Board will relay its decision to the Provost who will inform the Respondent. This shall be the final decision on the part of the University.
- e. The Provost will allow for submission of the report to ORI<sup>18</sup> or the appropriate sponsor no later than 120 days from the date the investigation began if there is a finding of research misconduct. If this time period cannot be met and PHS-supported research is at issue, the Provost must file a written request and explanation for an extension with the ORI.
- f. The Provost shall promptly notify Respondent in writing of the decision on research misconduct and, if applicable, disciplinary action. This decision shall be final, subject to a limited right of appeal to the Board of Trustees as described below.

## **7. Review of Disciplinary Actions by the Board of Trustees<sup>19</sup>**

If both the Committee and Provost recommend termination and removal of tenure, the respondent may appeal the disciplinary action, not the underlying finding of research misconduct, to the Board of Trustees ("the Board"). Such appeal must be in writing, must state the reasons for appeal, and must be presented to the Board within ten (10) days of the date of Respondent's receipt of notice of such disciplinary action. Thereafter, the Provost shall promptly transmit the final investigation report and his/her written recommendation to the Board of Trustees. The Board shall review the reasons for appeal, the final investigation report, the Provost's written recommendation, and any

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<sup>17</sup> If the Complainant or Respondent is the VPR or Provost, then the President, in consultation with the Secretary of the Faculty, shall fulfill the role of the Provost in sections 6 through 9 of this policy.

<sup>18</sup> If PHS-supported research is involved, the contents of the final report must comply with federal regulations (42 C.F.R. § 93.313).

<sup>19</sup> This Review is extended only to cases involving a tenured faculty member.

submission made by the Respondent relevant to the appeal, and may seek additional submissions or information from Respondent or the Provost. The Board shall notify both Respondent and the Provost of its decision, which shall be the final decision on the part of the University.

## **8. Special Measures**

- a. If there is a finding that research misconduct occurred and the Provost determines that further action is required, the Provost<sup>20</sup> shall direct the department head or program director<sup>21</sup> to notify the editors of publications to which abstracts and/or papers relevant to the research misconduct have been submitted, and request that the work be withdrawn prior to publication. If any relevant work has already been published, the department head or program director will request that a correction or retraction be published. The individual who was found to have committed research misconduct will ordinarily be responsible for preparing and presenting appropriate corrections and/or retractions.
- b. Should the procedure followed under this policy lead to a finding of no research misconduct by the Respondent, the party or parties who conducted the initial inquiry or formal investigation shall, as appropriate, undertake a good faith effort to restore the reputation of the Respondent. Reasonable efforts will also be taken to protect the standing of the individual(s) who raised the issue of possible research misconduct, unless the inquiry or investigation reveals that such individual(s) acted in bad faith, in which case appropriate disciplinary actions may be taken.

## **9. Reporting**

- a. If the research misconduct occurred in the context of externally sponsored research, the Provost shall instruct the Vice Provost for Research to convey the results of the investigation and any decision or further actions taken as a result of that investigation to the sponsor of the research.<sup>22</sup> This communication shall include a description of the procedure that was followed to investigate the allegation(s) and a summary of the views of the person(s) found to have engaged in research misconduct.
- b. The Vice Provost for Research shall file reports on allegations and investigations of research misconduct as required by the Federal Office of Research Integrity, Office of Scientific Integrity, or other relevant agency.

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<sup>20</sup> If the Complainant or Respondent is the VPR or Provost, then the President, in consultation with the Secretary of the Faculty, shall fulfill the role of the Provost in sections 6 through 9 of this policy.

<sup>21</sup> For the purposes of this section, the Associate Provost/Vice President for Research will fulfill the responsibilities of the department head when the research misconduct was committed by a department head or program director.

<sup>22</sup> If the Complainant or Respondent is the VPR or Provost, then the President, in consultation with the Secretary of the Faculty, shall fulfill the role of the Provost in sections 6 through 9 of this policy.



**Date:** December 12, 2017

**To:** WPI Faculty

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

**Re:** Motion to modify Internships section of Graduate Catalog and add course designators for Internships

**Motion:** On behalf of the Committee on Graduate Studies and Research, I move that several sections of the Graduate Catalog related to Internships be modified as described below, and that new course designators be added for Master's and PhD internships.

**Description of the Proposed Changes** (Note: by friendly amendments accepted by CGSR, ~~strike through~~ denotes text deleted and **bold underlined** denotes text added since the motion was first distributed to the Faculty on Dec. 5.)

**I. Graduate catalog text on Internships will be deleted from the Financial Aid section and a new section “Graduate Internship Experience” will be added.**

*The following sub-section on Internships (and associated sub-sub-sections contained within) of the Graduate Catalog is to be entirely removed:*

**Internships**

Graduate internship programs are offered in several disciplines. A graduate internship is a short-term work assignment (3 to 9 months) in residence at a company or other external organization that forms an integral part of a student's educational program....[additional text not shown]

**Special Notes for International Students:**

An international student on an F-1 visa must maintain full-time status for the duration of their graduate program....[through the end of this section]

*The following sub-section on Graduate Internship Experience (and associated sub-sub-sections contained within) is to be added to the Graduate Catalog (following the Military Leave of Absence sub-section):*

**Graduate Internship Experience**

Graduate internship experiences are available across several programs of studies at WPI in order to enhance the professional development of Masters and Doctoral students. The graduate internship is a short-term and temporary work assignment in residence at a company or other *external* organization that forms a complementary part of a student's educational program. An internship will appear on the transcript with a minimum of 0 credits and a maximum of 3 credits (as determined by the department/program). All students require the approval of their faculty advisor-of-record to participate in an internship. Furthermore, the student and their faculty advisor-of-record will define concrete performance metrics and objectives to be achieved during the internship prior to the experience.

The graduate internship experience must align with the student's plan of study and be related to the specific graduate degree program. **Because the purpose of an internship is to provide a student with a new experience,** Graduate students already employed full-time or part-time may not participate as interns at the same place of employment **without program approval.** Since the internship must be performed at an external site, WPI would not be considered an acceptable sponsor for a graduate internship. Typically, Teaching Assistants may not be on internship during the same time period during the academic year as when they are serving as a TA, but may pursue an internship over the summer or with departmental permission.

The graduate internship is not a requirement, but rather an option available to all graduate students enrolled in graduate programs that permit internships. Students may pursue graduate internship experiences of up to 3 credits per degree (as determined by the department/program). For-credit internship experiences are only for matriculated students. Graduate internships may not be applied to multiple degrees (i.e., BS/MS). Resources for graduate internships and job search tools are highlighted in the Career Development Center subsection in the Graduate Catalog. Enrollment in the graduate internship experience must adhere to established add/drop deadlines.

- 1) ***For Masters Students:*** Students enrolled in a Master's program may participate in the graduate internship experience after successfully completing their first year of **12 credits of** graduate coursework at WPI, provided they are in good academic standing. With approval of the ~~faculty advisor of record~~ **program designee,** Master's students participating in a graduate internship should register for the graduate internship course designated 5900.
- 2) ***For PhD Students:*** Students enrolled in a PhD program may participate in the graduate internship experience after successfully completing their first year of **12 credits of** graduate coursework at WPI, provided they are in good academic standing. With approval of the ~~faculty advisor of record~~ **program designee,** PhD students participating in a graduate internship should register for the graduate internship course designated 6900.

### **Special Notes for International Students:**

An international graduate student on an F-1 visa must maintain full-time status for the duration of their graduate program. International students with F-1 visa status may apply for two types of practical training:

1. Curricular Practical Training (CPT): CPT is used for graduate level internships while students are pursuing their degrees. CPT is authorized by the university and the requirement is that the internship is an integral part of an established curriculum. Internships should be for credit.
2. Optional Practical Training (OPT): OPT is typically used by students for one year of employment after completion of degree. It can also be used in part for summer jobs or part-time employment during the academic year if employment

is in the student's field of study. OPT requires approval by U.S. Customs and Immigration Services.

The following sub-sub-section on Internship Resources is to be added to the Career Development Center sub-section of the Graduate Catalog:

### **Internship Resources**

Resources are available at the Career Development Center (CDC) for graduate students seeking graduate internship experiences during their studies at WPI. The CDC maintains an extensive database of companies and other external organizations interested in supporting graduate students in their professional development via internships. All WPI students have access to this database, as well as the ability to apply to posted opportunities. To find out more, please contact the CDC.

## **II. Course designators will be created to allow students to register for up to 3 credits of Graduate Internship. Individual Departments/Programs will be able to “opt in” if they would like to offer internships.**

### **Proposed Course Descriptions:**

Note: XYZ = Program designation. Number of credits is at the discretion of each Department/Program.

#### ***XYZ 5900 “Master’s Graduate Internship Experience”***

(\*\*\* Credits)

A Master’s graduate internship experience is designed to enhance the professional development of the graduate student. Master’s graduate internships must align with the student’s plan of study and may be pursued at either a company or an external organization. This course is subject to approval by the ~~faculty advisor of record~~ **program designee** (pending administrative checks by the Registrar and the Career Development Center) to ensure that student’s program of study supports graduate internship experience and that the proposed internship aligns with student’s graduate studies.

#### ***XYZ 6900 “PhD Graduate Internship Experience”***

(\*\*\* Credits)

A PhD graduate internship experience is designed to enhance the professional development of the graduate student. PhD graduate internships must align with the student’s plan of study and may be pursued at either a company or an external organization. This course is subject to approval by the ~~faculty advisor of record~~ **program designee** (pending administrative checks by the Registrar and the Career Development Center) to ensure that student’s program of study supports graduate internship experience and that the proposed internship aligns with student’s graduate studies.

### **Rationale:**

An emphasis on supporting graduate programs is an important component of WPI’s Strategic Plan, Elevate Impact. One component of the PhD Plan is the evolution of the graduate student

internship into a professional development experience that would help further promote the growth of our PhD students as future innovators and leaders in a variety of careers, including academia, industry, and government. Many of the opportunities are also suitable as career-enhancing experiences for Master's students. The new catalog language will clarify that Master's and PhD students are eligible for internships.

The revised text is meant to be more accessible to graduate students and faculty. The previous location of the graduate internship description (under financial aid) is no longer desirable, since the goal is to promote the importance of the graduate student internship as a professional learning experience, rather than just a source of financial support. Instead, graduate internships will be described in the Registration Information and Procedures section of the Graduate Catalog.

The main purpose of the proposed language is to clarify who is eligible for a graduate internship and when, the duration of the internship, and to track internships at the university level for both MS and PhD students. The internships are meant to be a flexible and optional experience for graduate students at WPI.

**Resources:** No new resources are requested. Our existing infrastructure for the advertising of and application to off-campus internships available at the Career Development Center will be leveraged for graduate internship experiences. International House will use current processes to ensure that international students interested in internship experiences will receive the correct processing and documentation. New graduate internship experience course designations for graduate programs offering such experiences are included as part of this overall set of motions.

**Implementation:** AY2018/2019

(Note: This motion will be presented for discussion only at the December 12, 2017 Faculty meeting.)

**Date:** December 12, 2017

**To:** WPI Faculty

**From:** Committee on Governance (Prof. Gaudette, Chair)

**Re:** Motion to modify Bylaw Five of the Faculty Handbook

**Motion:** On behalf of the Committee on Governance, I move that Bylaw Five (on pages 1-15 to 1-16 of the Faculty Handbook) be modified to replace the restriction that the Secretary of the Faculty may not serve successive terms with a restriction that the Secretary of the Faculty may not serve more than two successive terms.

**Description of the Proposed Modification:**

The language (on page 1-16 of the Faculty Handbook) would be modified as follows (with text in underlined italics added):

“The Secretary of the Faculty is elected for a term of three years, and may not serve more than two successive terms.”

**Rationale:**

The Secretary of the Faculty (SOF) is the “senior elected member of the Faculty,” whose ability and effectiveness to carry out his or her responsibilities will be enhanced by increased continuity and past experience to oversee governance matters that evolve and recur over time.

Continuity and past experience:

Quite often, important faculty governance issues take time to fully address. Even after they are addressed, they recur because of new developments, misunderstandings, and turnover that takes place in administrative offices of the University. This year alone, COG has discussed the following issues:

- revising WPI’s Research Misconduct Policy;
- continuing the Faculty evaluations of administrators; and
- establishing a new academic division and conducting a search for a new Dean.

These are three current examples in which past knowledge and familiarity of how and why we have arrived at our current positions provide valuable insight in deciding how and why to move forward.

Another current example where having more past experience will make the SOF more effective is at the Annual Planning and Budget Process (APBP). The SOF is the one continuous representative of the faculty at the Annual Planning and Budget Process. It would be better for the faculty to have a representative present who continues to participate in the process over several years on par with the administrators involved, and with time learns how to best express the views of the faculty to most effectively influence the final decisions that are made.

More generally, continuity is important for effective faculty representation when it comes to building relationships, both among the faculty and with all levels of the upper administration. It is especially important to provide a voice of continuity when there is turnover in key academic administrative positions.

Continuity is also important in establishing relationships with trustees. These relationships take long periods of time to cultivate because of our limited opportunities for interaction with the Trustees. Experience is valuable to truly learn and navigate the processes used by the trustees and to identify the best ways to ensure that faculty perspectives are shared with them.

In our current system, every three years the SOF must learn a new position and master the day-to-day details of running the faculty governance office, carrying out the administrative responsibilities required and prioritizing which existing tasks should take precedence over others. It is important for the faculty to have the option to not reelect the SOF for a second term. But when the Faculty is satisfied with the current SOF after a first term, it will be extremely efficient and effective to maintain continuity and to build on the knowledge and experience of the current SOF.

Lastly, the WPI Faculty should have the choice to grant the SOF an appropriate length of time in service to not just learn and coordinate the operational details of the faculty governance infrastructure, but also to focus on a more strategic management of the faculty governance system, address strategic issues, and establish long-term working relationships with members of the administration. The current single term limit prevents us from exercising this option.

**Conclusion:**

When the WPI Faculty believe that the SOF has overseen the faculty governance system effectively, has represented them well, and can make further progress with added time in office, the Faculty should have the option to nominate and reelect the SOF to continue to do so. At the same time, if after three years of service, the Faculty wish to make an alternative choice for the SOF if it believes that option is best. The two-stage nomination and election process gives the Faculty full choice in the selection process and guarantees that the SOF will be reelected only if a strong consensus emerges that it is the best choice for the Faculty.

**Comparison of term limits with other Universities:**

Systems of faculty governance differ across universities, but one most similar to WPI's is the Faculty Assembly at Clark University.

**Comparison to a Faculty Assembly:**

*Clark University:*

(<http://www2.clarku.edu/faculty/facultygovernance/pdf-09-10/fac-handbook-Apr2010.pdf>)

Our WPI Secretary of the Faculty is a combination of two positions at Clark:

- Faculty Chair;
- Secretary of the Faculty.

Each officer is elected at-large for three-year terms and can choose to run for a second consecutive term. (No limit is specified.)

**Comparison to a Faculty Council:**

*University of North Carolina at Chapel Hill*

(<http://facultygov.unc.edu/about/secretary-of-the-faculty/>)

Elected members of the Council serve for terms of three years and are not eligible for election more than twice in any period of seven years.

The secretary serves a five-year term and is eligible for re-election.

Comparison to Faculty Senates is less precise, but here are a few:

*University of Washington*

<http://www.washington.edu/admin/rules/policies/FCG/FCCH22.html>

Senators are elected for two-year terms. A faculty member may be elected to an unlimited number of terms, except that a faculty member who has been elected to three consecutive terms shall not be eligible for election to the next term. The Secretary of the Faculty shall be a member of the faculty with tenure. The term of service shall normally be five years.

*Clarkson University*

[http://internal.clarkson.edu/hr/employee/pdf/om\\_pdf/om\\_sect2.pdf](http://internal.clarkson.edu/hr/employee/pdf/om_pdf/om_sect2.pdf)

Senator's term of office shall be three years. No limit on number or successive terms. The Faculty Senate shall elect its own officers consisting of a chair, a vice chair, and a secretary. No limit on number or succession terms.

*Tufts University*

<http://ase.tufts.edu/faculty/meetings/2016-2017/as/09-28-2016/senateBylawsDraft.pdf>

Senators serve three-year terms. A representative may not serve more than two consecutive terms. The officers of the Senate shall consist of the Senate President, the Senate Vice President and the Senate Secretary. They shall be elected annually for terms of one (1) year. No limit on successive terms for senate president, vice- president or secretary.

*University of Arizona*

[http://facultygovernance.arizona.edu/sites/facgov/files/constitution\\_approved\\_2.2.2017.pdf](http://facultygovernance.arizona.edu/sites/facgov/files/constitution_approved_2.2.2017.pdf)

The Chair shall be elected by the General Faculty in even-numbered years for a term of two years beginning June 1, and shall be eligible for re-election.

*Drexel University*

<http://drexel.edu/senate/documents/governance/bylaws/>

Senators shall be elected for three-year terms. No limit on number or succession of turns.

*Rensselaer Polytechnic Institute*

<http://facultysenate.rpi.edu/constitution-rensselaer-faculty-senate>

All members of the Senate with the exception of the officers will serve two-year terms, with half of the body elected one year and half the next. Each of the officers shall serve a three-year term, with the Vice President of the Senate to succeed to the position of President of the Senate in the second year, and the Chair of the Faculty in the third year; and the Recording Secretary of the Senate to succeed to the position of Secretary of the Senate in the second year, and the Secretary of the Faculty in the third year. No limit.

## **Appendix: Consent Agenda Motions**



**Date:** December 12, 2017

**To:** WPI Faculty

**From:** Committee on Academic Operations (Prof. Zeng, Chair)

**Re:** Motion to add a Writing concentration to the IMGD (BA) major

**Motion:** On behalf of the Interactive Media and Game Development program, the Committee on Academic Operations recommends and I move that a Writing concentration be added to the IMGD (BA) major in AY2018-19, as described below.

### **Description of the Proposed Writing Concentration:**

#### General Requirements for the IMGD (BA) major and for concentrations within the major:

The distribution requirements of the IMGD (BA) major require all students to choose 2/3 units from any one of the following IMGD Focus Pairs:

- Technical Game Development I & II (IMGD 3000 + 4000)
- Artistic Game Development I & II (IMGD 3500 + 4500)
- Digital Game Design II & Digital Game Design Studio (IMGD 3900 + 4900)
- Writing Narrative for IMGD & Advanced Storytelling: Quest Logic and Level Design (IMGD/WR 3400 + IMGD 4700) (NOTE: This focus pair will be added to the IMGD (BA) distribution requirements by an accompanying motion.)

All IMGD (BA) majors must also complete a 4/3 IMGD Electives requirement.

Concentrations are earned by choosing the IMGD Focus Pair relevant to their topic (IMGD 3500 + 4500 for Visual/Technical Art, and IMGD 3900 + 4900 for Design), and completing a topic-specific selection of 4/3 IMGD Electives.

#### Proposed Catalog Revisions

It is proposed that the above revisions to the IMGD (BA) major be formally documented by the following amendments to the language in WPI's undergraduate catalog.

Additions are indicated in underlined italics (with deleted text indicated by ~~strikethroughs~~).

### **IMGD CONCENTRATIONS**

Students pursuing the IMGD major may, at their option, choose to focus in one of ~~three~~ four topics of concentration:

- Visual Art
- Design
- Technical Art
- Writing

#### Writing Concentration

Students taking the Writing Concentration must:

1. Satisfy the 2/3 units IMGD Focus Pair requirement by choosing Writing Narrative for IMGD & Advanced Storytelling: Quest Logic and Level Design (IMGD/WR 3400 + IMGD 4700)

2. Satisfy the 4/3 units IMGD Electives requirement by choosing:

- Writing Characters for IMGD (IMGD/WR 2400) (1/3 unit)
- 3/3 units (including at least 2/3 units at 3000+ level) from any of:
  - Elements of Style (WR 2010)
  - Business Writing and Communications (WR 2210)
  - Introduction to Journalism (WR 2213)
  - Creative Writing (EN 2219)
  - Visual Rhetoric (WR 2310)
  - Rhetorical Theory (WR 3112)
  - Technical Writing (WR 3210)
  - Advanced Creative Writing (EN 3219)
  - Digital Rhetoric (WR 3310)
  - Other IMGD-related writing courses subject to program approval

3. Contribute substantially to the writing aspects of their Major Qualifying Project, as determined by the project advisor(s).

**Rationale:**

Students pursuing the current IMGD (BA) major may, at their option, choose to focus their studies in one of three areas of concentration:

- Visual Art
- Design
- Technical Art

However, the field of IMGD encompasses other skill sets of critical importance to both prospective students and their future employers. The ability to meet the unique creative and technical challenges of writing for interactive media and games is prominent among these.

Recent faculty hires and new IMGD-specific writing courses have substantially expanded IMGD's ability to serve this key competency area.

The addition of an optional Writing concentration to the IMGD (BA) major will broaden the scope, appeal and diversity of the IMGD program, expanding it to address the evolving needs and expectations of both students and industry.

**Resource Impact:** The proposed revisions to the IMGD (BA) major require no change in current IMGD or HU&A faculty count or physical/administrative resources, as all relevant courses are already offered by IMGD and HU&A on a regular basis, and will continue to serve the same number of students.

Course scheduling can meet all intended course offerings with enough flexibility to offer more sections of high demand courses, enabling us to meet programmatic goals and respond to student demand.

**Implementation Date:** The proposed Implementation date is AY2018-19.

**Date:** December 12, 2017

**To:** WPI Faculty

**From:** Committee on Academic Operations (Prof. Zeng, Chair)

**Re:** Motion to revise the Design concentration of the IMGD (BA) major

**Motion:** On behalf of the Interactive Media and Game Development program, the Committee on Academic Operations recommends and I move that the Design concentration of the IMGD (BA) major be revised in AY2018-19, as described below.

***Description of the Proposed Revisions:***

It is proposed that the above revisions to the Design concentration of the IMGD (BA) major be formally documented by the following amendments to the language in WPI's undergraduate catalog. Additions are indicated in underlined italics (and deleted text is indicated by ~~strikethroughs~~).

**Design Concentration**

Students taking the Design Concentration must:

1. Satisfy the 2/3 units IMGD Focus Pair requirement by choosing Digital Game Design II and Digital Game Design Studio (IMGD 3900 + 4900).
2. Satisfy the 4/3 units IMGD Electives requirement by choosing:
  - ~~2/3 units from any 2000+ WR courses, or any IMGD writing-oriented courses subject to program approval.~~
  - 2/3 units from any of:
    - Writing Characters for IMGD (IMGD/WR 2400)
    - Business Writing and Communications (WR 2210)
    - Creative Writing (EN 2219)
    - Visual Rhetoric (WR 2310)
    - Writing Narrative for IMGD (IMGD 3400)
    - Rhetorical Theory (WR 3112)
    - Technical Writing (WR 3210)
    - Advanced Creative Writing (EN 3219)
    - Digital Rhetoric (WR 3310)
    - Other IMGD-related writing courses subject to program approval
  - 2/3 units from any of:
    - History & Future of Immersive & Interactive Media (IMGD 4200 or 5200, but not both)
    - Serious Games (IMGD 4600)
    - Advanced Storytelling: Quest Logic & Level Design (IMGD 4700)
    - User Experience & Design (MIS 4741) or User Experience Applications (MIS 583), but not both
    - Game Design Studio (IMGD 5000)

- Design of Interactive Experiences (IMGD 5300)
- ~~User Experience & Design (MIS 4741)~~
- ~~User Experience Applications (MIS 583)~~
- Other 3000+ level IMGD-related design courses subject to program approval

3. Contribute substantially to the design aspects of their Major Qualifying Project, as determined by the project advisor(s).

**Rationale:**

The current Design concentration offered by the IMGD (BA) major expects students to satisfy the 4/3 unit IMGD Electives requirement by choosing:

- 2/3 units from any 2000+ WR courses, or any IMGD writing-oriented courses subject to program approval.
- 2/3 units from:
  - History & Future of Immersive & Interactive Media (IMGD 4200 or 5200, but not both)
  - Serious Games (IMGD 4600)
  - Advanced Storytelling: Quest Logic & Level Design (IMGD 4700)
  - Game Design Studio (IMGD 5000)
  - Design of Interactive Experiences (IMGD 5300)
  - User Experience & Design (MIS 4741)
  - User Experience Applications (MIS 583)

When the Design concentration was originally approved by the faculty (B16), two of the existing IMGD Writing courses (240X and 340X) were experimental, and therefore could not be explicitly specified in the catalog requirements. Accompanying motions propose converting both of these courses to permanent status.

The current requirements inadvertently omit two HU&A English (EN) courses focused on creative writing (EN 2219 and 3219). The IMGD faculty deems both courses appropriate options for satisfying the goals of the concentration.

The current requirements also fail to explicitly prohibit taking both the undergraduate and graduate User Experience courses (MIS 4741 and 583) towards the concentration.

Finally, the IMGD faculty deems it prudent to explicitly list the current HU&A Writing (WR) courses most relevant to IMGD students interested in design, to include language that will flexibly accommodate future IMGD-related writing and/or design course offerings (including experimental courses), and to clarify that MQP advisor(s) are responsible for determining if a student concentrating in Design has contributed substantially to the design aspect of their project.

The proposed revisions to the Design concentration address these issues

**Resource Impact:** The proposed revisions to the IMGD (BA) major require no change in current IMGD or HU&A faculty count or physical/administrative resources, as all

relevant courses are already offered by IMGD and HU&A on a regular basis, and will continue to serve the same number of students.

Course scheduling can meet all intended course offerings with enough flexibility to offer more sections of high demand courses, enabling us to meet programmatic goals and respond to student demand.

**Implementation Date:** The proposed Implementation date is AY2018-19.

**Date:** December 12, 2017

**To:** WPI Faculty

**From:** Committee on Academic Operations (Prof. Zeng, Chair)

**Re:** Motion to revise distribution requirements of the IMGD (BA) major

**Motion:** On behalf of the Interactive Media and Game Development program, the Committee on Academic Operations recommends and I move that the distribution requirements of the IMGD (BA) major be revised in AY2018-19, as described below.

***Description of the Proposed Revisions:***

It is proposed that the above revision to the IMGD (BA) major be formally documented by the following amendments to the language in WPI's undergraduate catalog. Additions are indicated in underlined italics.

**IMGD Focus Pair**

**2/3**

Choose 2/3 units from one of the following IMGD course pairs:

- Technical Game Development I & II (IMGD 3000 + 4000)
- Artistic Game Development I & II (IMGD 3500 + 4500)
- Digital Game Design II & Digital Game Design Studio (IMGD 3900 + 4900)
- Writing Narrative for IMGD & Advanced Storytelling: Quest Logic and Level Design (IMGD/WR 3400 + IMGD 4700)

**Rationale:**

The field of IMGD encompasses several skill sets of critical importance to both prospective students and their future employers. The ability to meet the unique creative and technical challenges of writing for interactive media and games is prominent among these.

Recent faculty hires and new IMGD-specific writing courses have substantially expanded IMGD's ability to serve this key competency area.

The current distribution requirements of the IMGD (BA) major require students to choose 2/3 units from any one of the following IMGD Focus Pairs:

- Technical Game Development I & II (IMGD 3000 + 4000)
- Artistic Game Development I & II (IMGD 3500 + 4500)
- Digital Game Design II & Digital Game Design Studio (IMGD 3900 + 4900)

To accommodate IMGD students interested in writing, we propose that the 2/3 IMGD Focus Pair requirement be revised to include a fourth option:

- Writing Narrative for IMGD & Advanced Storytelling: Quest Logic and Level Design (IMGD/WR 3400 + IMGD 4700)

**Resource Impact:** This proposed revision to the distribution requirements of the IMGD (BA) major requires no change in current IMGD faculty count or physical/administrative

resources, as both IMGD/WR 3400 and IMGD 4700 are already offered by the IMGD program on a regular basis, and will continue to serve the same number of students.

Course scheduling can meet all intended course offerings with enough flexibility to offer more sections of high-demand courses, enabling us to meet programmatic goals and respond to student demand.

**Implementation Date:** The proposed implementation date is AY2018-19.

**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Academic Operations (Prof. Zeng, Chair)  
**Re:** Motion to cross-list IMGD 2400 (Writing Characters for IMGD) as WR 2400

**Motion:** On behalf of the Interactive Media and Game Development program and the Humanities and Arts Department, the Committee on Academic Operations recommends and I move that IMGD 2400: Writing Characters for Interactive Media & Games be cross-listed as a HU&A Writing (WR) course beginning in AY2018-19.

### **Course Description:**

#### **IMGD/WR 2400. Writing Characters for Interactive Media & Games (Cat II)**

This course will present concepts and skills necessary to create compelling characters in interactive media and games. Topics covered may include the 3 dimensions of character, growth and development of the player-character and non-player characters, dialogue, character relationships and evoking emotions through rhetorical tropes.

Recommended background: Previous experience in the fundamentals of writing for interactive media and games, such as that provided by IMGD 1002: Storytelling for Interactive Media and Games.

Students may not receive credit for both IMGD/WR 2400 and IMGD 240X.

**Anticipated Instructor:** Prof. Lee Sheldon and other qualified instructors, including Dean O'Donnell, Alexandrina Agloro or Jennifer deWinter.

**Expected enrollment:** 20

**Intended audience:** IMGD majors and minors, students with Humanities & Arts depth in English, and students fulfilling the breadth component of the HU&A requirements.

**Rationale:** Many non-IMGD creative writers are interested in the fast-growing fields of interactive media and video games. Cross-listing IMGD 2400 as a HU&A Writing (WR) course will allow these students to count the course towards either the depth or breath component of their 6/3 Humanities and Arts requirement. It is also expected to improve course enrollment.

Due to the writing-intensive requirements, and the high amount of instructor and peer review in the course, its capacity has been set at 20 students.

**Implementation Date:** Implementation date for this action is AY2018-19.

**Resource Needs:** The increased enrollment due to cross-listing will not require new resources, as the enrollment is capped at 20. General resources required for the course are:

- Faculty: IMGD Professor of Practice Lee Sheldon is a professional game writer/designer who has written the standard text on writing for games. This course is part of his normal teaching load.
- Classroom needs no additional technology or facilities beyond standard A/V equipment.
- Laboratory: N/A
- Library resources: N/A
- Information Technology: Software needs would be met within current IMGD software resources and Zoom, which WPI already offers at no cost to faculty and students.



**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Academic Operations (Prof. Zeng, Chair)  
**Re:** Motion to add IMGD/WR 3400: Writing Narrative for IMGD

**Motion:** On behalf of the Interactive Media and Game Development program, the Committee on Academic Operations recommends and I move that the permanent course IMGD/WR 3400: Writing Narrative for Interactive Media & Games, as described below, be added in AY2018-19.

**Proposed Course Description:**

**IMGD/WR 3400. Writing Narrative for Interactive Media & Games (Cat II)**

This writing-intensive course covers concepts and skills necessary to write and implement narrative in interactive media and games. Topics include themes and style, different types of games and platforms, systemic storytelling, linear vs. non-linear narratives, editing, writing with purpose and audience in mind, and collaboration with other members of a development team.

Recommended background: Previous experience in writing for interactive media and games, such as that provided by IMGD/WR 2400: Writing Characters for Interactive Media & Games.

Students may not receive credit for both IMGD/WR 3400 and IMGD 340X.

**Anticipated Instructor:** Prof. Lee Sheldon and other qualified instructors, including Dean O'Donnell, Alexandrina Agloro or Jennifer deWinter.

**Expected enrollment:** 20

**Intended audience:** IMGD majors and minors, students with Humanities & Arts depth in English, and students fulfilling the breadth component of the HU&A requirements.

**Rationale:**

The field of IMGD encompasses many skill sets (technology, visual art and design) of critical importance to both prospective students and their future employers. The ability to meet the unique creative and technical challenges of writing for interactive media and games is prominent among these. IMGD/WR 3400 will significantly improve IMGD's ability to serve this key competency area.

This course was approved as an experimental course for AY2016-17 and AY2017-18. It was taught in B16 as a collaboration with a game design class populated by an internationally diverse group of students at the University of Skövde in Sweden. WPI students wrote a series of game development documents, and participated in the production of prototypes for applied games built by the Skövde students that tackled social issues, or taught various academic subjects.

The experimental design of the B16 section of 340X had a major issue that caused difficulties in several ways. The instructors at both WPI and Skövde relied on lesson plans that to a large extent they had used before collaborating. These led to differing expectations, and at times contradictory instructions to the two groups of students. For example, the students in the Swedish design class were told to make prototypes of analog games. Students in 340X were told that the analog prototypes would be for digital games. While analog prototypes for both are routinely created, the differing expected outcomes were incompatible.

Also, 340X was populated mainly by students from IMGD 240X (now IMGD/WR 2400), who in the earlier class created detailed documents for the games to be made in 340X. They were heavily invested in their own ideas and the work they had put in in the previous course to create designs for digital games, and were resistant to change. Yet the Skövde students needed to make analog games. Collaboration was problematic.

An additional challenge arose because opportunities for communication between the two groups was not monitored closely enough. Due to the six-hour time difference, students on both sides of the Atlantic found it difficult to find times to meet face-to-face via Skype.

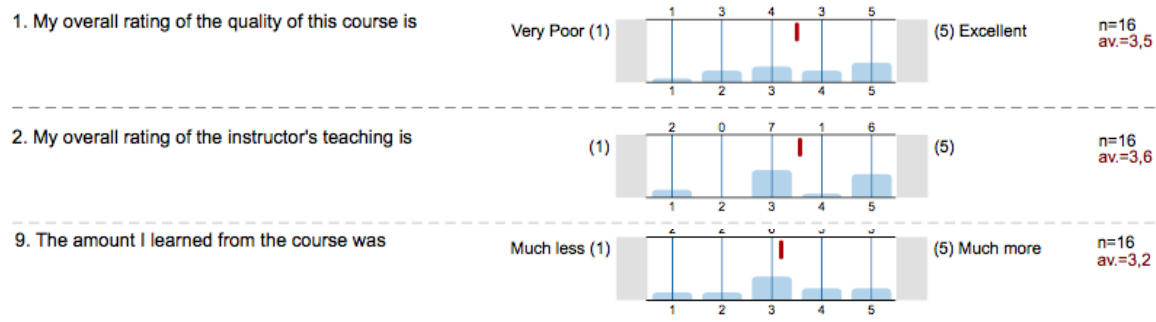
The course outcomes at both WPI and Skövde were examined and discussed at length, and new curriculum designs were developed. First, a unified lesson plan was created which established an analog game prototype as the goal for both groups. IMGD/WR 2400 was decoupled from 340X, and even though WPI students again originated ideas for the games, they were much more willing to collaborate.

Next, the instructors formalized communication through Zoom, email and texts, and made successful communication a graded outcome. Despite the same six-hour time difference, students could communicate often and well, and collaboration this time was organized, positive and fruitful.

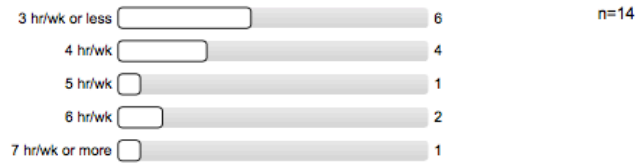
The B17 section of 340X (now designated as a writing-intensive course) appears to be working more smoothly. In particular, hours engaged in classwork outside the class have significantly increased.

IMGD/WR 3400 is projected to have continued growth, and will be cross-listed as a HU&A Writing (WR) course to address the interest non-IMGD creative writing students have in the fast-growing fields of interactive media and video games.

### IMGD 340X B16 Writing for Games I: Characters Student Evaluations



26A. On average, how many hours of the formally scheduled hours for lecture, conference, and labs did you ATTEND each week?



26B. On average, what were the total hours spent in each 7-day week OUTSIDE of formally scheduled class time in work related to this course (including studying, reading, writing, homework, rehearsal, etc.)?



We expect to continue the collaboration with the University of Skövde in future sections of the course.

Due to the writing-intensive requirements, and the high amount of instructor and peer review in the course, its capacity has been set at 20 students.

**Implementation Date:** Implementation date for this action is AY2018-19.

**Resource Needs:**

- IMGD Professor of Practice Lee Sheldon is a professional game writer/designer who has written the standard text on writing for games. This course is part of his normal teaching load.
- Classroom needs no additional technology or facilities beyond standard A/V equipment.
- Laboratory: N/A
- Library resources: N/A
- Information Technology: Software needs would be met within current IMGD software resources and Zoom, which WPI already offers at no cost to faculty and students.

**Impact on Distribution Requirements and Other Courses:** In the IMGD Technology (BS) major, this course will count towards the General IMGD distribution requirement of 5/3 units.

In the IMGD (BA) major, this course will count towards either the General IMGD distribution requirement of 8/3 units, the IMGD Focus Pair requirement if 2/3 units (when taken in conjunction with IMGD 4700), or the IMGD Electives requirement of 4/3 units.

It can also be applied towards the general Humanities and Arts requirement of all majors.

There is no additional faculty required. There is no anticipated impact on other departments or programs.

**Assessment:** This course will be assessed based on the aesthetic quality of the student work produced in the course assignments. Student feedback, particularly the outcomes of questions 1, 2, 9, and 26 of student course evaluations, and instructor evaluation and reflections will also be taken into account.

**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Academic Operations (Prof. Zeng, Chair)  
**Re:** Motion to drop ECON 1130: Introduction to Econometric Modeling and add ECON 2130: Econometric Modeling

**Motion:** On behalf of the SSPS Department, the Committee on Academic Operation recommends and I move that ECON 1130: Introduction to Econometric Modeling be dropped and ECON 2130: Econometric Modeling, as described below, be added.

**Proposed Course Description to be Added:**

ECON 2130: Econometric Modeling *Cat. II.*

Econometrics helps governments and businesses make more informed economic decisions. This course introduces the application of statistics and economic theory to formulating, estimating, and testing models about relationships among key variables. Topics include basic data analysis, regression analysis (including estimation, inference, assumptions, violations of assumptions, corrections for violations, dummy variables), and forecasting. Students will have the opportunity to use real-world socioeconomic data to test and interpret economic theories using econometric software. Successful students should also be able to formulate, estimate, and interpret their own testable relationships in other projects or fields of study.

Recommended Background: Some previous exposure to Economics, such as ECON 1110 and/or ECON 1120.

Degree Credit Exclusion: Students may not get credit both for ECON 1130 and ECON 2130

**Course Description to be Dropped:**

ECON 1130. INTRODUCTION TO ECONOMETRIC MODELING *ISU Only*

The purpose of this course is to provide students with an introduction to econometric modeling as it is applied in economics and to illustrate how it can be used in harmony with, or as an alternative to, system dynamics modeling. The first quarter of the course is devoted to discussing the methodological similarities and differences between econometric and system dynamics modeling, acquainting students with both the primary (survey instruments and controlled experiments) and secondary (government agencies and NGOs) sources of economic and social science data, and reviewing the basics of descriptive and inferential statistics. The remaining three quarters of the course are devoted to an examination of the assumptions that underlie the ordinary least squares model, the problems that occur when these assumptions are violated, and the methods that are available for correcting these problems. Throughout this process, the use of socioeconomic data, and the roles of economic theory and econometric software in modeling are emphasized. The course concludes with a presentation of how the econometric modeling can be used to complement system dynamics modeling.

Last offered: The course (ECON 1130) was last offered in the 2016/17 academic year. Specifically, it was last offered in D Term of 2017.

**Rationale:**

ECON 1130 was offered last year and was successful. We now seek to make the course a 2000 level course, as ECON 2130: Econometric Modeling. This course is required for majors in Economic Science. The course offers the opportunity for students to apply statistical methods to

economic phenomena. As such, it is recommended that students have an introductory level background in economics, making this course at least 2000 level. We are therefore requesting that the name be changed from Introduction to Econometric Modeling to Econometric Modeling would be more representative of what is being taught, and it is ultimately more consistent with an intermediate level course.

This course is essential to the undergraduate Economics program. A knowledge of econometrics is necessary for Econ majors and very useful for Econ minors. We are increasingly living in a data driven world and these skills are important for grad school, and for career success, whether in private sector industries, like finance and/or consulting, or in the public sector (Ex: Government).

The challenge with ECON 1130 is that when it was offered last year, many students falsely had the impression that they could be successful in the course without any prior knowledge of Economics. It was very clearly explained to them on the first day of class that this is not true, but by that point, many had already decided that this was how they would fulfill half of their social science requirement, for reasons such as the fact that it fit nicely into their schedule. The number and name change is to discourage such students before that even think about registering in this course.

This course is critical for Econ majors, and we want the focus to be on them. In light of this, a 2000 level designation is more appropriate.

**Resource Needs:** There are no changes in needs. We have faculty in the SSPS department who have, and can continue, to teach this course.

**Implementation Date:** The changes will go into effect for the 2018-2019 academic year.

**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Academic Operations (Prof. Zeng, Chair)  
**Re:** Motion to add CS 213003: Accelerated Object-Oriented Design Concepts

**Motion:** On behalf of the Department of Computer Science, the Committee on Academic Operation recommends and I move that CS 2130: Accelerated Object-Oriented Design Concepts, as described below, be added.

**Proposed Course Description:**

CS 213003: Accelerated Object-Oriented Design Concepts *Cat.I.*

This course covers the data structures and general program-design material from CS2102, but assumes that students have significant prior experience in object-oriented programming. The course covers object-oriented design principles and data structures more deeply and at a faster pace than in CS 2102. Students will be expected to design, implement, test, debug, and critique programs both for correctness and adherence to good object-oriented design principles. The course is designed to strengthen both the design skills and algorithmic thinking of students who already have a foundation in object-oriented programming. Recommended background: CS 1101 or CS 1102 and significant prior experience writing object-oriented programs from scratch. Advanced Placement Computer Science A courses should provide sufficient background; students from AP CS Principles courses or gentler introductions to Java Programming are advised to take CS2102 instead. Students may receive credit for only one of the following three courses: CS 2102, CS 210X, CS 2103.

**Anticipated Instructor:** Prof. Jacob Whitehill

**Rationale:**

The student population in CS 2102 has changed considerably over the last several years. Two changes are particularly relevant to this motion: (1) many more students are coming to WPI with significant Java experience (since the AP Computer Science exam switched to using Java), and (2) many more students with no programming experience prior to WPI are taking CS 2102. While CS 2102 has always had to accommodate both populations of students, it is increasingly clear that a shared course is not serving the students well: the current course sequences material to keep the advanced students engaged, which puts the newer programmers at a disadvantage. With current enrollments (300+ students in B-term 2017), we now have sufficient demand to justify addressing the problem properly with separate courses.

Students with prior Java experience do still need a formal course covering the non-basic material in CS 2102. We find that many students know the Java programming language well, but they do not know the other material (design principles and data structures) in the course. The new course is designed to help experienced students refine and enhance their existing skills, while also covering the material that they have not had in high school. Recommending that students with prior experience skip the course entirely is not viable from an educational perspective.

Separating the populations will allow us to re-order the topics in the current CS 2102 to make the course more approachable for students who first started programming at WPI. The major topics of both CS 2102 and CS 2103 will remain the same, but covered in more depth and in a different order in CS 2103.

Demand projections for the new course are based on the 2016 offering of the experimental course 210X as well as current enrollments for the 2017 offering of the same course. 70 students enrolled in the course in 2016, and 56 are currently registered for the 2017 offering.

Demand for the accelerated course is not expected to decline much, even if the population for CS 2102-like courses falls back to its recent levels of 225-260 students each B-term. Students with prior experience are coming through each of CS, RBE, and IMGD. Moreover, high-school offerings of CS are on the rise nationally.

Offering this course parallels the CS department's existing pair of courses CS 1101 and CS 1102, which support students with differing levels of prior experience. We do not anticipate having to split any further courses, because high-school curricula (including AP) do not go beyond the material in CS 2102.

The proposed course was offered previously as an experimental course (210X), which was taught by Prof. Jacob Whitehill during the first time he taught at WPI (2016 B-term). On student course evaluations, the course received a 3.90 for “overall rating of the quality of this course” (question #1) and 3.83 for “overall rating of the instructor's teaching” (question #2), 3.69 of “amount I learned from the course” (question #9).

*Instructor's reflections:* 210X was designed to be an accelerated, more advanced version of 2102. The course 210X was new, and hence the 1102 (i.e., the course preceding 210X/2102 in the intro CS sequence) students had to decide which course (2102 or 210X) was right for them without having concrete knowledge of what 210X would consist of. In addition, the 210X instructor (Whitehill) was new to WPI and had to figure out what “accelerated” meant in the context of 1st-year WPI students. In the end, it seemed to the instructor that — based on subjective feedback (e.g., after-class conversations, and email conversations during and after the course) — the course was more enjoyable for the more advanced (in terms of incoming programming and Java knowledge) students than for the less advanced students in the course. Across all students, the most frequently cited complaint (both informally and in formal evaluations) was the perceived lack of organization. Moving forward, the organization of the course will likely improve as the course is refined over time. One additional change that will likely occur in terms of the taught curriculum is the weighting of different topics. In the 2016 version of 210X, the emphasis of the advanced material (i.e., the parts not included in 2102) was more on algorithmic problem-solving than on object-oriented design. In the 2017 offering, this will be shifted slightly to give more attention to design.

**Implementation Date:** Implementation date for this action is the 2018-2019 Academic year.

**Resource Needs:**

- One additional large classroom. It is expected that CS 2102 will continue to need two classroom sections. Even once the students with prior experience shift to CS2103, we still expect populations upward of 200 students in CS2102, which is above levels at which we offer multiple sections of similar courses.
- Computer Laboratory space: the total number of laboratory hours will remain the same for the same total enrollment. Laboratory sessions will be partitioned between CS 2102 and CS 2103.
- Library resources (including staff support as well as print and electronic resources): none.
- Information Technology (special software or support from the Academic Technology center): none.

**Impact on Distribution Requirements and Other Courses:** Since the skills that students learn in 2103 are expected to be a superset of those learned in 2102, the catalog will be updated so that 2103 is *also* mentioned as a course that provides students with “recommended background” whenever 2102 is currently mentioned. No courses will expect or require that students have taken 2103 instead of 2102.



**Date:** December 12, 2017  
**To:** WPI Faculty  
**From:** Committee on Academic Operations (Prof. Zeng, Chair)  
**Re:** Motion to add CN 3542 and CN 3543 (Advanced Intermediate Chinese II and III)

**Motion:** On behalf of the Department of Humanities and Arts, the Committee on Academic Operations recommends and I move that the following two experimental courses be permanently added to the WPI catalogue as Category I courses commencing in Academic Year 2018-2019: CN 3542 and CN 3543 (Advanced Intermediate Chinese II and III), as described below.

**Proposed Course Descriptions:**

CN 3542 Advanced Intermediate Chinese II

This course builds on advanced intermediate Chinese skills, focusing on both conversational patterns and reading/writing. Class time will focus on dialogue and mastery of increasingly complex grammatical constructions, with emphasis on character recognition and production for reading and writing. Emphasis will be placed on integrating materials in real-world applications. Not open to native or heritage speakers without written permission of instructor. Recommended background: CN 3541 Advanced Intermediate Chinese I or equivalent.

No students will be allowed to receive credits for both CN 3542 and CN 354X.

CN 3543, Advanced Intermediate Chinese III

This course continues to build on students' advanced intermediate Chinese skills with increasing emphasis on reading and writing. Writing assignments will be geared towards expressing more complex topics in Chinese that are related to cultural phenomena in contemporary Chinese societies. Not open to native or heritage speakers without written permission of instructor. Recommended background: CN 3542 Advanced Intermediate Chinese II or equivalent.

No students will be allowed to receive credits for both CN 3543 and CN 355X.

**Expected enrollment:** each course will be capped at 18 students. Expected enrollment is 7-10 students in each class, with the expectation that enrollment will grow as the Chinese language program grows.

**Anticipated Instructor:** Asst. Teaching Professor Wen-Hua Du or Asst. Teaching Professor Huili Zheng

**Rationale:**

Demand for more advanced Chinese language offerings on campus is growing, as more and more incoming students arrive on campus with intermediate Chinese levels and a desire to continue study of the language. In addition, WPI's three IQP centers and two MQP centers in China have motivated Chinese language students to continue their study of the Chinese language beyond the six courses required for completing the HUA Requirement. Moreover, the Chinese Studies minor (approved in 2015) has attracted thirty-one students since its inception. With China identified as a strategic area for engagement for WPI, more advanced Chinese language offerings offer our students a way to engage with the Chinese speaking world while on campus and beyond.

In the past two years, thirty students placed into CN 2542 Intermediate Chinese II or above as their starting Chinese course. The new courses will allow such students to continue Chinese language study at WPI. Students who finish the sequence will have mastered the advanced intermediate level and will be

well-positioned for project work in China and more advanced language opportunities. These courses are not open to native or heritage speakers of Mandarin, unless by written approval of the instructor.

These courses CN 3542 and CN 3543 were initially offered as experimental courses CN354X and CN 355X, respectively.

**Impact on Distribution Requirements:**

As enrollments at WPI have increased, so has enrollment pressure on HUA language and content courses. Thus, it is not expected that these classes will adversely affect enrollments in other HUA courses.

This course sequence brings the Chinese program more in line with offerings in Spanish and German and continues building a China program geared towards STEM students. The addition of the two courses will allow students to achieve a more advanced level of language proficiency. The courses will accommodate students who enter WPI with advanced beginning or intermediate Chinese who want to fulfill the HUA Requirement through the study of Chinese. In addition, the courses will enable students starting at the beginning of the WPI Chinese sequence to attain a higher level of proficiency for project work in China, as well as post-graduation work in China. In addition, the courses will contribute to the development of global competency and a global mindset for enrolled students. More specifically,

- both courses can serve as the final inquiry practicum for students choosing to fulfill their HUA Requirement through the Chinese language track;
- students can combine language classes with 2000- or 3000-level Chinese history, philosophy, or culture classes and a China-related inquiry seminar related to China (e.g., Inquiry Seminar in Asian History, Urban History, Business in the Post-Socialist State, Comparative History, or Rhetorical Communication) to complete their HUA Requirement with a thematic focus on China. Or they can combine two Chinese language courses taken as breadth with depth courses from any other HUA discipline (with the exception of other languages) and an inquiry seminar/practicum in the selected depth discipline to complete their HUA Requirement;
- both courses can count toward the language requirement of the Chinese Studies minor.

**Resource Requirements:**

- 1) These courses will become part of the regular annual offerings (Category I). Dr. Wen-Hua Du or Dr. Huili Zheng, HUA's current Chinese instructors, are expected to teach the courses. Any smart classroom on campus will serve the purposes of the two courses.
- 2) Current classrooms have proven sufficient in terms of size and technology.
- 3) No new resources are required.

**Implementation Date:** The anticipated implementation date for these courses is the 2018-2019 academic year: A and B terms.