## WORCESTER POLYTECHNIC INSTITUTE January 10, 2019

To:

8. Adjournment

The WPI Faculty

From: Tanja Dominko Secretary of the Faculty The fifth Faculty meeting of the 2018-2019 academic year will be held on **Thursday**, **January** 10, 2019 at 3:15 pm in Olin Hall 107. T. Dominko 1. Call to Order • Approval of the Agenda • Approval of the Consent Agenda and the Minutes from 12-6-18 2. Faculty Governance report T. Dominko 3. President's Report L. Leshin 4. Provost's Report W. Soboyejo 5. Memorial Resolution – • Prof. Carlton W. Staples B. Savilonis 6. Committee Reports Committee on Governance (COG) Faculty Conduct Policy M. Richman 7. New Business

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#### WORCESTER POLYTECHNIC INSTITUTE

Faculty Meeting Minutes December 6, 2018

#### **Summary:**

- 1. Call to Order
- 2. Special Announcement
- 3. Secretary's Report
- 4. President's Report
- 5. Provost's Report
- 6. Committee Business: CAO, CGSR, CGSR
- 7. Special Reports: Task Force on the Status of NTT Faculty; Update on the Faculty Conduct Policy
- 8. Adjournment

#### **Detail:**

#### 1. Call to Order

The fourth Faculty meeting of the 2018-2019 academic year was called to order in Olin Hall 107 by **Prof. Dominko** (BBT). She pointed out that the meeting is being recorded for the purpose of accuracy in taking minutes. The agenda (with the Special Announcement moved ahead to follow the approval of Agenda, Consent Agenda and Minutes), and consent agenda (with one typo correction, and including the minutes from the December 6, 2018 Faculty meeting) were approved.

## 2. A Special Announcement

**Prof. Dominko** introduced **Prof. Phillies** (PH, retired 2015) to honor Prof. Vassallo's (FBS) December 31 retirement. Prof. Phillies' made the following remarks:

I come to praise Helen Vassallo's contributions as a teacher, as a Department Head, and -- the place where I first encountered her -- as a part of faculty governance. As a teacher, she contributed innovative methods that could actually be shown to work, even if they were not the current fad. As a Department Head, she contributed analytic rigor and scrupulous honesty in support of her department and its faculty.

When I arrived here, close to 35 years ago, she made a vigorous and successful effort to get me involved in faculty governance. People have sometimes asked how I became so active. Now you know who to thank. Helen. In speaking of faculty governance, in her many committee roles, Helen played a major part in giving us the happy system we have today. Contrast with when I arrived here. Faculty governance was new. Twenty years earlier there was no faculty governance. No tenure. At Faculty meetings, faculty set in their assigned seats (numbered so a janitor could take attendance) while the Dean sat in front and told us what to do. Helen and friends changed all that, much for the better.

When I last spoke here, when I retired, I mentioned that cute, friendly little animal, the stegosaur. [produce stegosaur] You see, they are cute, friendly, but, alas, they have faded from sight. You hardly ever see them any more. In that last respect, they are exactly the opposite of Helen, who will never fade from our hearts." [Present Helen with stegosaur]

## **Prof. Dominko** read a message from **Prof. Hanlan** (HUA), who is currently in London.

I write to tell you how delighted I am that the Faculty will honor Helen Vassallo on the occasion of her retirement from WPI. I have known Helen as both a colleague and, I am proud to say, a friend since she first arrived on campus. In her years at WPI, Helen has served conscientiously on virtually every Faculty committee as well as serving as an Academic Department Head and Secretary of the Faculty. In everything that Helen has done over the years, she demonstrated integrity, honesty, keen intelligence, and, perhaps most admirably of all, determination to be

fair and open to all with whom she had interactions, both students and colleagues. Helen stands as a model for what we should all aspire towards.

I will not miss Helen as a friend, for I will continue to be her friend, but I will miss her day-to-day presence amongst us. We were, all of us, richer for having Helen as a trustworthy colleague who presented a consistent model of fairness, compassion, and professional decency. Let us not say good-bye, but farewell to Helen with profound thanks for her contributions to this institution and to all of us."

#### **Prof. Rulfs** (BBT) made the following remarks:

When I first met Helen, it was a bit like meeting a legend. Rumor had it she was the mother of ten children, knew how to shoot a gun, and had her helicopter pilot's license. My own mother was 4'10", so I was used to dealing with small but formidable women, but this was a whole new level of accomplishment.

Helen's first graduate degree was in a biologic science, so we had that bond. I of course do not have the additional graduate education, expertise or experience in management that Helen has. I could go on in this vein for some time, but I'd rather reflect on other things, perhaps, but not only, because a list of Helen's accomplishments could make the rest of us feel inadequate.

In the six years Helen and I taught together in our Great Problems Seminar series, I learned more from her than from perhaps any other professor including those I had as a student myself. Along the way I did learn some rudimentary elements of management, along with Helen's famous acronyms: WIIFM- what's in it for me?; IDKIHAN- I didn't know it had a name; and one we can all relate to GIGO- garbage in, garbage out!

But I learned so much more- about treating students with compassion while setting the bar high and providing the support they need to reach it. I watched her deal with dysfunctional student teams in a straight forward, no-nonsense manner while leaving every student with his/her dignity and self worth intact. She talked to them often about "term 17" -the term after graduation- and did her very best to be certain they were prepared to be personally and professionally successful. Again, I could go on in this vein and many others and still not even hit the highlights. But again, I won't.

I will treasure the time spent with and the things learned from Helen, and will be sad that many of you will not have that opportunity now that she is retiring. The faculty, the many students she has taught, and WPI as a whole have benefitted from her many years and endless contributions to our community. While she may be retiring, I expect she will continue to be at the other end of an email should we need her wise counsel or sympathetic ear, because Helen is one of those people who embody the phrase "she bleeds WPI crimson" and we are all the better for it. Thank you, Helen.

## **Prof. Richman** (ME) made the following concluding remarks:

Great institutions oftentimes have profound effects on the individuals who help make them run. Only rarely do those individuals have even greater influence on the institution itself. But that is exactly what Prof. Helen Vassallo has done in her 36 years of gentle but determined devotion to WPI.

By the time she arrived here for good as an Associate Professor in 1982, she had earned a B.S. from Tufts University in biology, an M.S. from Tufts in pharmacology, and a Ph.D. from Clark University in Physiology in 1967. That's a lot of "ologies" – especially for someone who was hired to teach Management!

But that's because - after spending 15 years working her way to the top of Astra Pharmaceuticals – she turned around and earned her MBA from....none other than.....WPI. In search of someone with "street smarts" the Management Department hired Prof. Vassallo - even though she told them at the time that what she really had were "street dumbs" - because she had already made every mistake a manager could make.

In her first year at WPI, she also served as a visiting Fellow taking special classes in the Sloan School at MIT. The way she describes it – typical Helen - she would drive to class in Cambridge in the morning - come back to WPI in the evening - and then teach her students what she'd just learned at MIT that day.

And since then she has involved herself in every aspect of WPI campus culture and life:

- Head of the Department of Management (1989-1994)

- The Second Woman to be named a Full Professor at WPI (1991)
- Long time Chief Justice of the Campus Hearing Board
- Recipient of the Trustees Award for Outstanding Teaching (2003)
- National Sorority Advisor of the Year (2005)
- First Woman elected Secretary of the Faculty (2006-2009)
- A "Woman of Consequence Award" recipient from the City of Worcester (2008)
- And a Goat's Head Lifetime Commitment Award (2013)

When the Great Problem Seminars came along, Helen jumped right in. In fact, many of us thought that with her experience as a mother of ten children, "Feed The World" was based on dinner at her house!

Helen's research expertise is in organizational behavior and the management of planned change. And I can tell you from the advice she has given me over the years, that she knows a good thing or two about disorganizational behavior and managing unplanned change, as well!

In her own understated way, Helen has told me a million times that "it's the hard stuff that's easy, and it's the easy stuff that's hard." And it took me a while to figure out what that meant. For the engineers and scientists among us trying to navigate the complexities of the academic world, what she's been trying to teach us - simply yet profoundly - is that......it's much easier to manipulate your equations than it is to manage your people!!

And sure enough, Helen has demonstrated her love for WPI through her respect for and her endless patience with its people.

There used to be a bench between Higgins Labs and the old Alumni Gym near the Beech Tree circle. And when the weather was good - and sometimes even when it wasn't - Helen and I would meet there to figure out how to deal with the latest sticky issue. And while I was always anxious to hear her insights, the parts I actually liked best about those meetings were all the many interruptions. Campus police and other staff members – many of whom I did not know – would invariably stop to greet Helen with a warmth that she had clearly earned by caring about them over time. Faculty members would wave to me, but they would come over to hug Helen tightly. And students – especially women – would run up to her and tell her - with excitement - about their latest plans, recent triumphs, and even a few setbacks. Clearly she was their parent away from home.

Originally my intention was to make a motion today that simply would not permit Prof. Vassallo to retire. Maybe even put it in our Bylaws!! But I knew that our crack Parliamentarian....would rule it out of order.

So instead - on behalf of the faculty at WPI - I will simply thank Prof. Helen Vassallo...for demonstrating how to be actively and gracefully involved in our community, for reminding us that it is sometimes hardest to be gentle to one another, and for being wise beyond her years. Yes!!, well beyond her years. Thank you – Helen Vassallo.

Prof. Vassallo was presented with gifts and a cake which read "We Love you Helen". Prof. Vassallo thanked everyone. She stated that at her home, she is an educated zoo keeper, because of ten kids, and that skill sometimes came in handy here at WPI. She was very grateful for this surprise honor.

**Prof. Dominko** recognized Trustee David LaPre, who has been working with a group of faculty members, administrators and trustees to collaborate on matters of mutual institutional concern. She thanked him for being at today's meeting.

**Prof. Sanbonmatsu** (HUA) announced that WPI has established an AAUP (American Association of University Professors) chapter on campus. Prof. Sanbonmatsu is the inaugural President of the chapter; Prof. Gaudette (BME) is the Vice-President; Prof. Medich (PH) is the Secretary; and Prof. Hakim (ECE) is the Treasurer. AAUP is a professional, academic organization that defends academic freedom and provides advice to faculties on norms and best practices. Even in this early stage, WPI now has several dozen AAUP members. The hope is for 100 percent participation of all teaching faculty members (NTT, TTT or Graduate Student). The chapter will provide an additional mechanism to get to know

one another other better and address questions and concerns. There will be a meeting on December 10, which will be the last meeting of the term.

## 3. Secretary's Report

**Prof. Dominko** reported on actions taken in response to Faculty motions approved at the Special Faculty meeting on November 15<sup>th</sup>. Faculty Committee Chairs and other elected members of Faculty Committees have met several times with the Board of Trustees, the President and the Provost to outline the process and the timeline for revision of the proposed bylaws. The collaboration would assure that bylaws are revised in a manner that will include meaningful Faculty input. At the same time the Board, the President, the Provost and the Faculty will collaborate on developing processes for meaningful collaboration in the future.

## 4. President's Report

**President Leshin** was grateful for the opportunity to speak at today's meeting during a time that has challenged the institution. President Leshin focused on three values. With respect to the value of responsibility, President Leshin viewed that her special responsibility was to build bridges between the faculty, the administration, and the trustees, and to ensure collaboration between all three constituencies even through difficult times. She explained her understanding of how seriously the Faculty feel about the missteps that have been taken, and how important faculty stewardship is to the institution. President Leshin apologized and asked for forgiveness for not doing more to prevent the recent mistakes by the Board.

With respect to the value of seeing good in others, President Leshin expressed her appreciation that everyone at WPI is working on behalf of our shared mission. She concurred with Prof. Dominko's positive outlook and believes that the Board will soon agree to a May 15 extension for implementation of their By Laws. President Leshin thanked Prof. Dominko for her leadership, and she thanked Prof. Boudreau (HUA), Prof. El-Korchi (CEE) Prof. Cocola (HUA), Provost Soboyejo, Trustee LePre and Truste Hall for their work so far. The President expressed the belief that WPI will weather any future storms in higher education.

Finally, the President addressed the importance of about standing up for what's right, and gave assurance that she would not tolerate any attempt to roll-back the protection of tenure or academic freedom at WPI. To the extent that our current problems are due to a lack of collaboration between faculty, administration, and trustees, President Leshin expressed the belief that it is possible to repair missteps. She looked forward to continuing efforts to build WPI – including growing the Faculty body to 300 in the next five years. President Leshin emphasized that we can build a healthy collaborative environment and make WPI better in the process.

#### 5. Provost's Report

**Provost Soboyejo** explained that he is inspired by WPI's project based learning, its commitment to our parliamentary way of faculty representation, its purpose-driven research, and its shared values. With respect to sharing the work that needs to be done, he aspires to transforming any feelings of "us and them" to "us and us." While President Leshin had asked for forgiveness, Provost Soboyejo also accepted some responsibility for the misunderstandings over the By-Law changes that were proposed, and assured the faculty that the Board had acted with good intentions. He hoped that with forgiveness, we could rebuilding of trust and work together again to make WPI truly the best university in New

England. Finally, provost Soboyejo thanked faculty governance, the faculty itself, the staff and the Board of Trustees for their support over the past few weeks.

## 6. Committee Reports

CAO

**Prof. Mattson** (CBC), for the Committee on Academic Operations (CAO), moved that the undergraduate student graduation list (previously distributed) be approved for Dec. 30, 2018 graduation. The motion **passed**.

#### **CGSR**

**Prof. Scarlata** (CBC), for the Committee on Graduate Studies and Research, moved that the graduate student graduation list (previously distributed, with two additions) be approved for Dec. 30, 2018 graduation. The motion **passed**.

#### **CGSR**

**Prof. Scarlata** (CBC), for the Committee on Graduate Studies and Research, moved that a new graduate program in Neuroscience (NEU) be added to the WPI Graduate Catalog. She gave a brief background on the motion, and it's potential to WPI. **Prof. Troy** (BME) inquired if the statement of "no additional resources needed" was accurate. Prof. Ruiz (CS) stated that two new faculty lines have been approved for the program, and are in the process of being filled. She also stated that the departments involved endorse this program, and are aware of added commitments for Faculty members. Prof. Ryder (BBT) asked if it was possible for a student to get through this program, not having taken the first course, and knowing what a neuron is. Prof. Scarlata stated that the student would be required to take the initial course, unless they have already had background neuron courses. Prof. Ruiz thanked the entire Biology and Biotechnology department for their feedback on this program, and stated that it was decided not to make the initial course a required one, since it is expected that most students coming into this program will already possess this background knowledge from previous courses. **Prof. Gaudette** (BME) stated that it sounds like the program will begin before the Faculty members are hired. He stated that this is an exciting new proposal, but that there are still many questions to be answered. Prof. Srinivasan (BBT) stated that currently there are no experimental courses being taught, discussed the ideas and goals for the program, and the intent to broaden the scope with additional courses. Prof. Scarlata stated that the advising for each student would be on an individual basis, to ensure the success of that student in the program. **Prof. Skorinko** (SSPS) stated her support for the program, and stated that students are leaving or turning away form WPI because we don't have a neuroscience program. **Prof. Rulfs** (BBT) inquired about the low total of proposed 8 students and if there was any investigation of cross-listing of these courses. Prof. Ruiz stated that the immediate plan would be to have five students per year, with an eventual Ph.D and B.S. program as well as an undergraduate Neuroscience program. Prof. Gericke (CBC) stated that this program is a good idea and a unique opportunity. **Prof. Spanagel** (HUA) moved to extend the meeting by 20 minutes. The motion passed. **Dean Taylor** (FBS) asked how the program would be deemed successful, with such a low student count. Prof. Scarlata stated that it was believed that the courses would be well attended, and that the program would be successful, and serve to propel an undergraduate and doctoral program as well. The motion passed.

## 7. Special Reports

**Prof. Boudreau** (HUA), Chair, as well as **Prof. Heilman** (CBC), Co-Chair, presented an update from the Task Force on the Status of NTT faculty. (See **Addendum #1** attached to these minutes). Prof.

Boudreau stated that this task force was formed by Secretary of the Faculty Dominko, with 5 TTT Faculty members and 5 NTT Faculty members. This process began with Prof. Richman in 2012, where NTTs had poor salary, no status and were treated very differently from department to department. In 2012, the 3/5 year policy was eliminated, and COAP now reviews promotion capacity, and sends their recommendations to the Administration, which is an example of a collaborative process. The task force has been looking into ways to give a better working environment for the NTT Faculty, and to make recommendations to the Faculty and Administration regarding the long term commitment of the institution to these Faculty members, and what their responsibilities and roles are. Profs. Dougherty (CS) and Wodin-Schwartz (ME) conducted department head interviews to establish how each department include NTT Faculty members, and to what degree. The task force has been collecting data in areas of length of stay vs. turnover, and information collected form the COACHE survey, which has shown much unhappiness from the NTT Faculty. There was a recent open meeting for NTT Faculty, and there is a proposed survey for NTT Faculty in the works. Prof. Boudreau stated that we would all be stronger with TTT and NTT Faculty unite, so this is an opportunity to strengthen WPI while serving the interest of all Faculty. She stated that NTT Faculty play a critical role in carrying out WPI's mission.

**Prof. Richman** (ME) presented an update on the work done so far to revise that Faculty Conduct Policy. The work is being done so far by Prof. Boudreau (HUA), Prof. Dominko (BBT), and Prof. Richman (ME), and General Council Bunis. The process began in late August, was suspended due to complications created by the Board's revised By-Laws, and resumed last week. The intention is to bring a revised policy to the faculty at the January faculty meeting, gather input from all interested parties, and produce a final draft for the February faculty meeting. The team is optimistic that this iterative process will produce a policy that the faculty will approve. **Prof. Hakim** (ECE) suggested that the team talk to people who have experienced a faculty conduct issue, and focus specifically on the authority of the inquiry committee to dismiss a case. He also suggested seeking outside legal advice for the proposed policy. **Prof. Boudreau** (HUA) explained that there were different ways to address his suggestion concerning the inquiry committee, and that she hoped he would read the draft carefully to see if his concern was addressed. Prof. Richman emphasized that there will be plenty of opportunity for the faculty members to provide their input.

#### 8. Adjournment

Meeting was adjourned at 4:55pm by **Prof. Dominko**.

Respectfully submitted,

Tanja Dominko Secretary of the Faculty

#### Addenda on file with these minutes:

1. Addendum #1 Update by the Task Force on the Status of NTT Faculty

## **Appendix: Consent Agenda Motions**

**Date**: January 10, 2019 **To**: WPI Faculty

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

**Re**: Motion to add ID2000 approved by the Office of Academic Advising and The Division of

Student Affairs on 6/28/18.

<u>Motion</u>: The Committee on Academic Operation recommends and I move, that ID2000 Mapping Your Mission as described below, be added.

Course/Catalog Description: ID2000, Mapping Your Mission, (Cat I, 1/6 unit).

Every student that graduates from WPI has a major, but what about a mission? This course helps participants explore their personal values, strengths, and talents and the ways they can use these personal characteristics to improve the world around them. Through the course, participants will identify a personal mission and a plan to work toward achieving their mission. Participants will explore the ways their major and their mission can intersect. Students may not receive credit for ID200X and ID2000.

**Anticipated Instructors:** Connie Aramento, Coordinator, Major and a Mission Support, and Emily Perlow, Assistant Dean of Students, co-taught with other colleagues.

**Credentials:** Connie Aramento earned a Master of Science in Educational Leadership from Central Connecticut State University. She is an adjunct faculty member at St. John Fisher College. Connie is also a holistic health coach and Certified Gallup Strengths Coach, serving as the CEO of Soul Sync Wellness, LLC.

Emily Perlow holds a Ph.D. in Educational Policy and Leadership with a specialization in Higher Education from University of Massachusetts-Amherst and a Master of Arts in College Student Personnel from Bowling Green State University. Emily currently serves as an adjunct faculty member at Central Connecticut State University in the Student Development in Higher Education program.

Both Connie and Emily are trained in adult learning needs, curriculum development, using active learning techniques, and facilitation.

**Rationale:** This course is offered in support of the WPI strategic plan initiative Major and a Mission, which seeks to "leverage our students' strengths, passions and interests, and empower them to pursue a more intentional path at WPI and reflect on the connections between their academic coursework and co-curricular pursuits" (WPI Strategic Plan, 2015). The strategic plan implementation committee has

explored ways to better help students reflect on their areas of passion and to intentionally select and pursue experiences at WPI that make them more well- rounded, better equipped to address the world's problems, and feel greater satisfaction with their future career and life choices. This course was created to support these efforts.

Major and a Mission related activities will help students connect their passions and their major with greater social issues. Research shows (Espinosa, 2011; Hill et al., 2010; Ma, 2011; Wang & Degol, 2013) that women and underrepresented minority (URM) students often leave STEM because they do not see the ways classroom learning will benefit society. This course, therefore, could help WPI better retain women and URM students in the STEM pipeline. Additionally, according to the Gallup-Purdue Index research (2014), six college experiences are linked to post-college wellbeing: (a) faculty who make students excited about learning; (b) faculty who care about students as a person; (c) mentors who encourage students to pursue their goals and dreams; (d) project work; (e) internship experiences that apply classroom learning; and (f) involvement in extracurricular activities. WPI provides many of these experiences currently, but we need to do a better job of helping students integrate and make meaning of these experiences. In particular, we find that sophomore students struggle as they transition between being a receiver of knowledge in their first year to a creator of knowledge in the junior year.

To meet this need, we propose to permanently offer a course that helps students explore their strengths, personal values and passions, sources of happiness, and personal missions. The goal of the course is to help students reflect upon and intentionally identify the activities and experiences that will help them pursue activities that complement their major, help students be more satisfied with their college experience, and articulate the ways in which their passions and majors interrelate. The course is targeted at second year students and could be taken by students looking to explore themselves and their goals more deeply. It might also be taken by students who are looking to explore more intensely following their completion of the Discovering Majors and Careers course (FY 1800). It could serve as an excellent pipeline for students who WPI identifies as possible contenders for scholarships and fellowships early in their college careers. To truly be competitive for some of the most elite fellowships (i.e. Goldwater or Rhodes), students must be able to clearly articulate the ways in which their mission and major are intertwined.

Learning objectives and activities for the course are as follows:

Learning Objectives	Sample Activities to Achieve Objectives
Students can articulate their personal mission statement	Mission statement writing exercise
Students can identify at least one social issue about which they feel passion	Students discuss the role they plan to play in influencing the social issue

Students choose experiences that help fuel their identified passion	Student engages in at least 2 curricular and co- curricular experiences around this passion
Students know their strengths	Students take Strengthsfinder or other strengths based instrument
Students can describe how their personal values influence their choices	Students participate in an exercise to explore personal values (ex. values auction)
Students have a plan to grow and learn in their mission area	Students have a "mission map" that includes courses, co-curricular activities, research experiences, conferences, etc. that will help them learn more about their mission area

Students can articulate how their	Students describe how they plan to use their mission
mission guides their future	to make decisions throughout their lives
aspirations	to make decisions unoughout then hives
aspirations	Students describe the ways their mission intersects
	with their career choice
	Students present their missions through an e-portfolio.
Students take steps toward establishing	Students can identify experiences and activities that
personal happiness/well- being	make them feel happy
	Students discuss forms of wellbeing and which best
	approaches their ideal happiness
	approaches their racar nappiness
	Students rate their satisfaction with various components
	of their life and develop a happiness plan to improve
	their satisfaction
Students practice reflection	Students answer several reflective questions.

The course was offered for-credit in B-Term 2016 and D-2018. A total of 13 students participated in the experience in B-2016 and 15 students took the course in D-2018.

## **Course Evaluation Feedback**

*B-2016 and D-2018 (n=25)* 

Question 1: Overall rating of the quality of the course:	4.52
Question 2: Overall rating of teaching:	4.80
Question 9: Amount I learned from this course:	3.96

Question 26A: Hours in attendance Question 26B: Hours outside of class

3 hr/wk or less	0	0 hr/wk	0
4 hr/wk	23	1-5 hr/wk	17
5 hr/wk	0	6-10 hr/wk	6
6 hr/wk	0	11-15 hr/wk	1
7 hr/wk or more	1	16-20 hr/wk	0
		21 hr/wk or more	0

#### Feedback from course evaluations.

Feedback from students on the value of the course or ways the course challenged their assumptions included:

- "It made me think that it is easy to create a plan for my future goals. The mission map idea gave me a clearer feeling for how I could accomplish my goals and made the future a little less scary."
- "I especially was affected with the units on self-discovery (strengths, values, etc.). Now I like to think in terms of positives ("what are people good at?").
- "It made me think about the choices I am making in my time here that will benefit my future and if they are not, how can I change them so they will be?"
- "It really helps you understand your life and help you plan your future. Favorite class since in this school."
- "I believe this course should be taken by every undergrad so they can take another look at where they are going and possibly what else they want to do in life."

Additionally, many participants' definitions of success changed. For example, one participant stated their initial definition of success was to: "Make enough to support yourself and others." At the conclusion of the 7-week experience, their definition had changed to, "Be aligned with your goals, values, and needs."

#### Instructor feedback and reflections

Overall, a pre- and post-test measuring outcomes related to sense of purpose, sense of hope, and sense of meaning showed that students gained a stronger sense of their strengths, an improved sense of hope, a stronger sense of agency, and a greater presence of meaning in their lives. As measured through graded assignments, we felt students demonstrated:

- Improved reflection skills.
- Reported changes in perspective about the importance of choosing pathways that contribute to personal happiness in addition to financial security.
- The ability to articulate their values, strengths, and passions.
- The ability to create a map for their future that assists them in merging their major and their areas of passion.

The first time we taught the course, students did not like the way we constructed the ePortfolio assignments. We adjusted for the second time and the ePortfolio became the final project rather than a poster. We also graded assignments directly in the ePortfolio rather than having students post them to the portfolio and again on Canvas.

We also worked to better hone the reflection assignments. It's likely no surprise that this was a challenging part of the course for students. We worked to scaffold the reflections to grow deeper throughout the course.

For the second offering of the course, we reduced outside readings and added a book called *Designing Your Life: How to Build a Well-Lived, Joyful Life* (Burnett & Evans, 2016). This book uses design thinking framework to think about life planning. Feedback on the book was mixed—some found it helpful, others did not like that we didn't follow the order of the book because it did not align with the topics of the course as written.

The second offering of the course also included guest alumni who took non-traditional career paths. Students reported these talks as some of the most influential course experiences.

For future offerings, we plan to better integrate the book readings into course content and continue to offer experiential course activities. We'd like to hone in more on pre/post pathways data and explore ways to help students perceive clearer pathways for moving forward.

**Implementation Date**: 2018-2019 academic year. The goal will be to offer the course annually in B-Term and D-Term. The class would meet two times a week for 1 hour and 50 minutes and would be a 1/6 credit

**Resource Needs:** The course will currently be team taught with volunteer instructors who are currently on 12-month contracts. Over time, as the course scales or grows in popularity, we may explore whether to offer a stipend for instructors, similar to the Insight program.

Open, flexible seating classroom for 25. Staff will initially teach the course, so no additional financial resources are needed at this time

**Impact on Distribution Requirements:** This course will not change any distribution requirements. It will count towards free electives.

**Date**: January 10, 2019 **To**: WPI Faculty

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

**Re**: Motion to change the title and description for RE2722 Questions of Good and Evil approved by

HUA Faculty on Oct. 26, 2018

<u>Motion</u>: The Committee on Academic Operation recommends and I move, that the title and description for RE2722 Questions of Good and Evil be changed as described below.

#### Existing title, description and course offering schedule:

#### RE2722 Questions of Good and Evil Cat. I

Notions of good and evil shape many of our day to day religious and philosophical claims and arguments. This course concerns questions and approaches to what is often called "evil," through a study of classical and contemporary texts and problems. The focus of the course will vary, but will include metaphysical, moral and political ideas about kinds and relations of goods and evils from different religious and philosophical perspectives. This study takes into account notions of error, ignorance, wrong-doing, freedom and responsibility evident in contemporary religious and philosophical debate.

## Proposed title, description, and course offering:

#### RE2722 Modern Problems of Belief Cat I

This course examines the ways in which religious problems of meaning have been encountered in the context of the eclipse of religion in Western culture from the Enlightenment to the present. The class emphasizes challenges presented to traditional belief systems by modern thought in areas such as the sciences, psychology, textual criticism, and historical events, as well as some religious responses to those challenges. How do religions respond to the limits of human intellectual capacity, limits of human endurance, and limits of moral comprehension?

**Explanation of Motion:** The original class covered challenges to traditional theism. Most schools would call this class Problem of Evil and would see it as belonging to a theological philosophy class. The new proposed title would cover similar modern era challenges to religious traditions, but would do so in a less tradition-bound way, allowing for multiple disciplinary approaches. The new course would replace the older titled one as an even exchange. Because it would cover similar materials, but with a more flexible framework, no new course number is necessary from a curricular perspective.

**Rationale:** This interdisciplinary flexibility will assist during the transition of staffing within the department, better tailoring it to fit the skills of newly added philosophy and Religion staff added as a retirement replacement.

**Impacts on students:** No changes to other courses, programs, and distribution requirements are necessary. We anticipate no impact upon students. The course will continue to be taught as a Cat. I class.

## **Resource Needs:**

The course would be taught with currently available faculty (Beth Eddy, Rebecca Moody, or Yunus Telliel). The proposed change would require no new classrooms or any other additional support.

**Implementation Date**: The new course listing is proposed for the 2019-2020 catalog, to be implemented in that same 2019-2020 academic and every academic year thereafter.

**Date:** January 10, 2019 **To:** WPI Faculty

**From:** Committee on Graduate Studies and Research (Prof. Scarlata, Prof. Rao, co-Chairs) **Re:** Dual Program leading to an MS in Mechanical Engineering and an MS in Management

<u>Motion</u>: The Committee on Graduate Studies and Research recommends and we move that the program leading to both a coursework MS in Mechanical Engineering and a coursework MS in Management (as described below) be added to the ME graduate program offerings.

(The motion was approved by the Foisie Business School on Nov. 7, 2018 and by the Mechanical Engineering Department on Nov. 13, 2018)

## **Description of the Proposed Program:**

## Dual MS in Mechanical Engineering/MS in Management

The dual program allows students to both increase their knowledge and skills in mechanical engineering while simultaneously increasing their business acumen. The MS in Management (MSMG) also provides a compelling pathway to an MBA, recognizing the value of work experience.

The dual program requires 36 graduate credit hours, which are distributed as follows:

18 credits from the MS ME distributed as follows:

#### Either:

• 18 graduate course credits in mechanical engineering (must include ME 5000; does not include ME 598);

or

- 15 graduate course credits in mechanical engineering (does not include ME 5000 or ME 598); and
- 3 credits of graduate course credits in mathematics (MA)\* see Note on Plan of Study below.

[Note: All full-time students are required to register for the graduate seminar (ME591) every semester.]

18 credits from the MS MG distributed as follows:

- ACC (3 credits): Take both ACC 500 Accounting and Finance Fundamentals (1 cr.) and ACC 502 Financial Intelligence and Strategic Decision-Making (2 cr.)
- FIN (3 credits): Take FIN 503 Financial Decision-Making for Value Creation
- OBC (3 credits): Take 505 Teaming and Organizing for Innovation
- ETR (3 credits): Take ETR 593 Technology Commercialization: Theory, Strategy and Practice
- MKT (3 credits): Choose one of: MKT 500 Marketing Management or MKT 568 Data Mining Business Applications
- OIE (3 credits): Choose one of: OIE 501 Designing Operations for Competitive Advantage, OIE 544 Supply Chain Analysis and Design, OIE 552 Modeling and Optimizing Processes, OIE 555 Lean Process Design, or OIE 558 Designing and Managing Six-Sigma Processes

Example Plan of Study:\*

Fall year 1	ME Grad (6 cr), OIE 501 (3 cr)
Spring year 1	ME Grad (3 cr), ACC 500 (1 cr), ACC 502 (2 cr)
Summer year 1	open
Fall year 2	FIN 503 (3 cr), ME Grad (6 cr)
Spring Year 2	ETR 593 (3 cr), MKT 500 (3 cr), OBC 505 (3 cr)

[\*Note: An MA graduate course must replace three credits of ME graduate credits if ME 5000 is not taken.]

#### Additional Notes:

- Students in the BS/MS program in ME are not eligible for the program.
- Students must satisfy the admission requirements for both the MS programs in ME and MGT.

#### **Rationale:**

There is a need for people with both greater technical depth than is afforded with a BS in Engineering and also have business knowledge and skills. Positions such as product managers in technical companies require both. This dual MS program will offer students the chance to pursue both in roughly the same time (2 years) that might have spent doing either an MS in ME or an MSMG program. Dual degree programs between engineering/science and business have become almost common place in recent years.

The intent of the dual degree program is to offer an attractive option to students who are looking to WPI for an MS in Mechanical Engineering and also see themselves in a leadership role in the near future. If successful, this should increase the number of MS students in ME and also the number of students in the MS MG program and the MBA program.

#### Compared to the MS in ME requirements:

There are three credits (27 vs. 30) fewer required for the MS in ME, but with the additional requirement the three remaining credits be replaced by an additional nine credits of business courses

#### Compared with the MS in MG requirements:

The existing 30-credit MSMG requires students to select four courses out of a list of ten. The proposed Dual Degree requires students to take three of these ten courses. ETR 593 is substituted for ETR 500. Additional options are provided for MKT and OIE. Four of the elective courses are satisfied by graduate ME courses (and thus double counting for both degrees).

#### Optional Pathway to the MBA:

Upon earning the MSMG and after 2 or more years of professional experience, students may return to WPI to complete the requirements for an MBA with just 27 additional credits, including the hallmark project experience of WPI (MBA admission required).

Based on the Example Plan of Study above, students would need to take the following courses:

Break for 2 Years work	
experience:	
Fall	MIS 500 (3 cr), ACC 505(1 cr), FIN 504 (2 cr)
Spring	BUS 500 (3 cr), OBC 506 (3 cr), Any Elective (3 cr)
Summer	BUS 590 (3 cr), OBC 533 or 537 (3 cr)
Fall (second fall)	BUS 595 (3 cr), BUS 599 (3 cr)

Example plan of study for MBA after completing MSMG (taking MKT 500 and OIE 501 as part of MSMG)

#### Resources, short term:

We can offer this dual degree program as defined above with existing courses. We would need support from WPI marketing to attract students.

## Resources, longer term:

If the program is successful, we would like to create some additional courses that would make the dual degree program truly distinctive and integrated. These additional courses might be cross listed between Mechanical Engineering and Business and be required. Resources would be required to develop and deliver these new courses. An example would be a product development course that included project management topics.

Appendix: Competitors/similar programs:

Harvard

 $\frac{https://www.hbs.edu/mba/academic-experience/joint-degree-programs/school-of-engineering-and-applied-sciences/Pages/default.aspx$ 

#### Stanford

https://cs.stanford.edu/academics/current-masters/joint-cs-msmba-degree

NYU

http://www.stern.nyu.edu/programs-admissions/mba-programs/dual-degrees/mba-ms-in-biology

Georgia Tech

https://www.scheller.gatech.edu/degree-programs/mba/dual-degree/index.html

Johns Hopkins

http://advanced.jhu.edu/academics/dual-degree-programs/biotechnology-mba/

**MIT** 

https://lgo.mit.edu/

Columbia

https://www8.gsb.columbia.edu/programs/mba/academics/dual-degrees

Purdue

https://engineering.purdue.edu/Engr/InfoFor/DualDegrees

**UMass** 

https://www.isenberg.umass.edu/programs/masters/dual

**Date:** January 10, 2019 **To:** WPI Faculty

From: Committee on Graduate Studies and Research (Prof. Scarlata, Prof. Rao, co-Chairs)

**Re:** Motion to approve the revision of the Financial Technology ("FinTech") Graduate Certificate,

approved by the Robert A. Foisie School of Business faculty on November 20<sup>th</sup>, 2018

<u>Motion</u>: The Committee on Graduate Studies and Research recommends and we move for the approval of the revision of the FinTech graduate certificate to be effective for AY2018-19.

**Rationale:** To better meet the needs of the market to monitor and understand the changing technology landscape and innovation in the financial sector, we propose adding BUS 546 – Managing Technological Innovation and FIN 503 - Financial Decision-Making for Value Creation as detailed below.

## **Certificate Description:**

The graduate <u>Certificate in Financial Technology</u> is designed to prepare professionals with the necessary technological and business foundations to lead the creation, implementation, and commercialization of technology-enabled financial solutions. The certificates provide the analytical and management tools for leadership decision-making related to the evolution of the financial sector as a result of rapid technological innovation and savvy consumer expectations. Although a student may pursue the certificate on a standalone basis, it is specifically designed to complement existing WPI graduate programs (e.g., MSIT, MSMI, MSMG, MBA, or MS in Financial Mathematics). The director of the Financial Mathematics Professional MS Program has been consulted regarding the design of this certificate and has reviewed this proposal on behalf of that program to ensure that the certificate is complementary to the financial mathematics curriculum.

## **Certificate in Financial Technology Courses (12 Credits Total)**

To qualify for the 12-credit Certificate in Financial Technology, you must meet the specific admission requirements for the Certificate in Financial Technology outlined below and complete 4 courses consistent with the following requirements.

### **Two Required Foundational Courses (6 credits)**

- FIN 522: Financial Institutions, Markets & Technology and –
- MIS 500: Innovating with Information Systems or BUS 546: Managing Technological Innovation

#### **One Required Financial Course (3 credits)**

Choose from one of the following four courses:

- ACC 500: Accounting and Finance Fundamentals (1 credit) combined with ACC 502: Financial Intelligence and Strategic Decision-Making (2 credits)
- FIN 500: Financial Information & Management or FIN 503: Financial Decision-Making for Value Creation
- MA 574: Portfolio Valuation and Risk Management
- MA 575: Market and Credit Risk Models and Management

## One Required Technology/Data Course (3 credits)

Choose from one of the following four courses:

- DS 501: Introduction to Data Science
- ETR 593: Technology Commercialization: Theory, Strategy & Practice
- MIS 581: Information Technology Policy and Strategy (Prerequisite: MIS 500 or equivalent content, or instructor consent)
- MIS 582: Information Security Management

This multidisciplinary graduate certificate in FinTech is offered by the Foisie Business School (FBS) in response to rapidly growing market and student needs. The certificate is designed to provide students a structured platform for multidisciplinary learning that is relevant to the needs of the FinTech sector and that is acknowledged formally by the University with an academic credential.

## **Resource Needs:**

Because this certificate leverages existing courses to build a new multidisciplinary offering, no additional faculty resources will be needed to support the program.