FACULTY MEETING AGENDA
May 1, 2019
3:35 PM
Heritage Commons, Samuel Read Hall Building

Meeting called to order.

I. **Approval of the draft minutes** for the April 3, 2019 faculty meeting. *(Sent with this agenda.)*

II. **Reports**

   A. President
   (The report will be distributed via email from the President's Office.)

   B. Provost
   (The Provost will be available to answer questions.)

   C. Principal Policy Making Committees
   (*Committee reports from Academic Affairs, Academic Technology and Online Education, Curriculum Committee, Faculty Welfare, General Education, and Graduate Council follow this agenda as Appendices A-F. Committee chairs will be available to speak to the reports and answer questions during the meeting.*)

   D. Other reports:
   1. General Education Coordinator Report. **See Appendix G.** Cathie LeBlanc will be available to answer questions during the meeting.)
   2. FYS Assessment Report (FYS Steering Committee). **See Appendix H**. Cathie LeBlanc and others will be available to answer questions during the meeting

III. **Old Business**
None

IV. **New Business**

   A. Resolutions of Standing Committees
   None

B. **MOTION:** The Steering Committee shall organize a Task Force of appropriate size and consisting of a representative cross section of faculty constituencies in order to consider transitioning our current form of faculty governance to a senate or other appropriate representative model. This Task Force shall be made up entirely of faculty, though testimony from other members of the community is certainly welcome. This task force shall report back to the full faculty with an initial report on progress by December 2019. The chair of the Task Force shall be appointed by the Faculty Speaker. (Submitted by Elliott Gruner).

C. **MOTION: To amend the Faculty Bylaws, ARTICLE XI/ Section D: Committee Descriptions: 7. General Education Committee, a. Composition** (Submitted and presented by Kate Elvey and Brandon Haas, Co-Chairs of the General Education Committee). The proposed language may be found in **Appendix I**.

D. **MOTION: To approve the Intellectual Property Policy** (Submitted by Lisa Doner, Chair, Faculty Welfare Committee). See **Appendix J.**

Announcements: *Note: Please limit announcements to matters that are urgent, timely (happening within the next few days to a week), and have not been/will not be disseminated through multiple other means. In other words, let's keep the announcements short and sweet!*

APPENDIX A:

<div align="center">

Academic Affairs Committee Report
Chair, Jason Cordeira
May 2019

</div>

The Academic Affairs Committee (AAC) met on Monday 15 April 2019 and did not meet on Friday 26 April 2019.

The Monday meeting primarily focused on a discussion of initiatives that will be undertaken during AY19–20 that will principally include establishing policy for prior learning assessment (PLA). The objective is for the PLA to complement existing policies on "credit by examination". The goal is to bring a draft of this policy forward for discussion and a listening session during University Days in August 2019. A key issue is that we seek the input of programs that would specifically benefit from and utilize the PLA policy. As such, we also seek to fill one vacancy for the AAC committee for AY19–20 with a hope for a volunteer from such a program in order to help inform the development of this policy. The policy would be cleaned up during Fall 2019 based on feedback, presented again for feedback at January Jamboree, and brought forth to the faculty in Spring 2020.

AAC Chair: Jay Cordeira

APPENDIX B:

Academic Technology and Online Education Committee (ATOEC) Report
Chair, Lynn Johnson
May 2019

Submitted: April 25, 2019
Submitted By: Lynn V. Johnson, ATC Chair
ATC Meeting Date: April 9, 2019

Action Items:
- Faculty survey was finalized and has been sent to faculty. Due date for submission of survey is May 3, 2019. Data will be analyzed over the summer, presented to the committee in the Fall of 2019, and shared with the faculty later in the Fall 2019.
- Technology Innovation Proposal (TIP) Form Update: Form has been revised and will be converted to an online form. The online form will be in place for use beginning Fall 2019.

Discussion Items: Working Groups
- Student Survey: The survey was reviewed and revised. It will be brought back to the committee during the April 30th meeting for further review.
- Online Education Policy: Working group reported progress and requested input from the committee. Additional input from those who teach online courses will be requested. Discussion centered around whether it should be a policy or a "best practice" document and whether or not it can be enforced (and by whom).

Reminders:
- **Please complete the Academic Technology Survey by May 3rd – Thank you!**

APPENDIX C:

<div align="center">

Curriculum Committee Report
Chair, Scott Coykendall
May 2019

</div>

The Curriculum Committee met on April 19 for its final meeting of the year. We had a surprising number of proposals to discuss but were nevertheless able to finalize a new Curriculum Committee Guide. We further agreed to change the committee's fall schedule of deadlines as noted in the joint-announcement (see below) with the General Education Committee. The Curriculum Committee continues to discuss cluster curriculum, including possible new cluster codes, and looks forward to continuing these discussions in the fall.

Respectfully submitted,
Scott Coykendall, 2018-2019 Chair
psu-curriculum-chair@plymouth.edu

Curriculum and General Education Proposal Deadlines 2019-2020

Dear colleagues:
We are writing to inform you about significant changes to the process for developing curriculum and general education proposals for 2019-2020, including changes to the deadlines for curriculum proposals and a new web-based proposal system.

2018-2019 saw a record volume of work for those that design, approve, and implement curricular changes and development across campus. The Curriculum Committee considered almost 350 proposals (at the February meeting alone, they considered 119 proposals), while the General Education Committee considered over 70 new proposals and sunsets combined, most submitted for our February meeting. However, this number will rise significantly again given that no Direction Sunsets were up for renewal this year. All of those proposals were, in turn, handled by the Registrar's Office, and most were approved by the Provost or the Associate Provost.

There are many explanations for this increased activity--e.g., the change to 4-credits, program responses to cluster- and URI-initiatives, the merging of graduate and undergraduate curriculum groups, and reinstatement of sunsets. No matter the reasons for the increase in volume, in order for faculty to maintain effective governance of the curriculum, and in order for the administration to cope with the volume of changes to Banner and Degree Works, several changes will be made to the process for developing curriculum and general education proposals for 2019-2020. Those changes include:

1. The reinstatement of Mary Campbell to her role as Director of Curriculum Support. We are pleased to say this change has already occurred and we look forward to the additional support Mary will again be able to offer faculty who are grappling with curriculum changes or additions.
2. A new web-based proposal system called CourseLeaf that will streamline the process for proposing new or modified curriculum to the Curriculum and General Education Committees.
3. A series of training and workshop sessions throughout the Fall that will help faculty to modify or design new curriculum, design blanket agreements, and navigate the requirements of Curriculum and General Education policies.
4. New calendar of deadlines that will make the workload for the Curriculum Committee, General Education Committee, Registrar's Office, and Provost/Associate Provost more manageable.

We have included some details below, but the combination of new software, a new Associate Provost, and the resulting changes in the way the committees operate, will necessitate some additional changes as the Fall semester unfolds.

Courseleaf
We will be rolling out the CourseLeaf Curriculum product, known as CIM (pronounced "Kim"),in the Fall. This is a powerful workflow system designed specifically to manage the curriculum approval and curriculum change management process in higher education. Once the implementation is complete, all course and curriculum changes would start in CIM and make

their way through various stages of electronic review and approval, mimicking the current cumbersome paper process, all the way through to approval and implementation in the next academic catalog. CIM integrates with our student information system Banner, as well as the web based academic catalog rolled out in Fall 2018. We have been working hard with stakeholders across campus to implement the CIM system with PSU policies and procedures, as well as help streamline the overall curriculum management structure on campus. We look forward to rolling it out in Fall 2019!

While we anticipate a full implementation of Courseleaf will eventually replace most need for traditional Curriculum and General Education forms, it is likely that those forms will still be used for all proposals in the early part of the Fall semester, and will remain in use for other proposals in rare circumstances.

Training & Workshops

Beginning with University Days and continuing through September and October, the Curriculum Committee, General Education Committee, Registrar's Office, and Provost/Associate Provost will offer a variety of sessions designed to train faculty in the use of Courseleaf and to help faculty work through common revisions such as:

- converting programs from 3- to 4-credits
- designing new programs
- designing blanket agreements
- discussion of sunset proposals and requirements

Those sessions that happen during the semester will be repeated twice, at different times, to accommodate as many teaching schedules as possible. More details will be announced at the beginning of next semester.

Additionally, both committees have created new handbooks that spell out their policies and procedures. These handbooks will be updated as necessary.

- [The Curriculum Committee handbook can be found here.](#)
- [The General Education handbook can be found here.](#)

New Calendar of Deadlines

No matter the volume of changes that are proposed, the next year's catalog *must* be in place before Spring class registration. The hundreds of proposals and sunset renewals that flooded the Curriculum and General Education Committees in February, in particular, presented an enormous challenge to the committees, the Provost/Associate Provost, and ultimately to the Registrar's Office. Many of these proposals came to the Provost/Associate Provost on the day of the Curriculum Committee deadline (and several came even later). That left members of the committee with less than a week to read more than a hundred proposals (on top of their teaching responsibilities). What's more, many of the last-minute proposals were especially problematic. This presented additional challenges for the programs that proposed them, the faculty who serve on the committees, and the members of the Registrar's Office tasked with implementing these changes. In order to deal with these recent trends, the Curriculum Committee, General Education Committee, and Provost/Associate Provost will be adjusting their deadlines in order to allow more time in January and February for the committees and Registrar's office to approve and implement catalog changes.

Fall Deadlines - All New Course Proposals and Curriculum Change Proposals must be submitted early enough for the Provost or Associate Provost to approve them **before the final day of the Fall semester**. This will allow the Curriculum Committee to review the proposals throughout January, work with the programs to resolve issues in the proposals, and decide which proposals can be approved in our online voting protocol and which will need to be discussed at the February Curriculum Committee meeting. Because new programs require the approval of the full faculty after they are approved by the Curriculum Committee, we will only consider new program proposals at the November Curriculum Committee meeting.

- August 30 – **General Education** proposals due for the September 9 Gen Ed meeting
- August 30 – Deadline to submit materials to **Provost/Associate Provost** for the September 20 CC meeting.
- September 13 – **General Education** proposals due for the September 23 Gen Ed meeting
- September 13 – **Curriculum Committee** Proposals due for September 20 CC meeting.
- September 27 – Deadline to submit materials to **Provost/Associate Provost** for the October 18 CC meeting.
- October 4 – **General Education** proposals due for the October 14 Gen Ed meeting
- October 4 – **Curriculum Committee** Early deadline for October CC electronic voting.
- October 11 – **Curriculum Committee** Proposals due for October 18 CC meeting.
- October 18 – **General Education** proposals due for the October 28 Gen Ed meeting
- October 25 – Deadline to submit materials to **Provost/Associate Provost** for the November 15 CC meeting.
- November 1 – **Curriculum Committee** Early deadline for November CC electronic voting.
- November 8 – **Curriculum Committee** Proposals due for November 15 CC meeting **(final deadline for new program proposals)**.
- November 15 – **General Education** proposals due for the November 25 Gen Ed meeting
- November 29 – **General Education** FINAL deadline for all gen ed sunsets and proposals for 2020 catalog
- November 29 – FINAL deadline to submit materials to **Provost/Associate Provost** for the February CC meeting.
- November 29 – **Curriculum Committee** Early deadline for December CC electronic voting.
- December 13 – **Curriculum Committee** *FINAL* deadline for all course/program proposals for 2020 catalog.

All proposals must be approved by the Provost/Associate Provost (if appropriate) at least 2 weeks prior to the curriculum committee deadline so that resource implications can be better considered as part of the approval process

Please send your Curriculum questions to psu-curriculum-chair@plymouth.edu
Please send your General Education questions to psu-general-ed-chair@plymouth.edu

APPENDIX D:

<div align="center">

Faculty Welfare Committee Report
Chair, Lisa Doner
May 2019

</div>

In March, the Provost Dorff indicated that revisions to the Faculty Handbook should be entrusted to the Faculty Welfare Committee. Therefore, our meeting in April was a work session to review the current Faculty Handbook and identify all the areas in need of updating and/or revision. We established which entities on campus seemed best suited to create updates for individual sections, including Faculty Welfare, Human Resources, Academic Affairs, the Library, the Registrar, the Curriculum and Gen Ed Committees and the Unions. These groups will soon receive an email, a link to a download/upload site, and a request to designate someone to be responsible to revise the document with up-to-date information. When we meet again in Fall 2019, Faculty Welfare will pull together the revisions and present an updated Handbook for consideration to adopt at the October 2019 meeting.

Motion:
The Faculty Welfare Committee moves that the Revised Intellectual Property Policy presented at the last meeting be adopted for immediate use.

Future Tasks for the Faculty Welfare Committee:
We expect to work with the Provost to develop a Promotion and Tenure advisory committee with representation from all faculty groups.

As a reminder, anyone wishing to contact Faculty Welfare can send an email to:
psu-facultywelfarechair@plymouth.edu

Respectfully,
Lisa Doner, Faculty Welfare Committee Chair

APPENDIX E:

<div align="center">

General Education Committee Report
Co-Chairs, Brandon Haas and Kate Elvey
May 2019

</div>

The General Education committee met in April and have a number of updates.

The committee voted to update bylaws so in order to remove the department member restriction on Gen Ed Committee membership. This puts the Gen Ed Committee in line with the Curriculum Committee and is a better reflection of current makeup of the university.

The committee has updated proposal forms and has created a Gen Ed checklist for all Directions and Connections courses. These forms should assist faculty in developing course proposals and with Sunset renewals. We will also be adding example syllabi that demonstrate effective annotation for Gen Ed designation requirements. These documents will be posted on the Faculty Governance blog page for easy access.

The committee met with the Curriculum Committee in developing a Joint Motion for a unified calendar for course proposals. All course proposals and Sunset renewals will be due by the final day of the fall semester. This provides an extension for Sunset renewals as the current deadline is December 1.

If you plan to submit a proposal that would ADD a Gen Ed designation to a course that currently has a different Gen Ed designation, you will need to submit Sunset renewal paperwork with the proposal in order to have a *single renewal date* for all designations.

Lastly, the committee is moving forward with a call for an Assessment Advisory Council based on the recommendation of the Gen Ed Outcomes Assessment Task Force. The call is attached as Appendix A. This is related to the formation of a Gen Ed Assessment Advisory Group that will begin work on a pilot for Gen Ed norming to take place this summer.

All Gen Ed related communications and proposals should go the address below, rather than to the co-chairs directly.

Please send all proposals and other inquiries to our new "Gen Ed Committee Chair" email address: Psu-general-ed-chair@plymouth.edu

Gen Ed Committee Co-Chairs: Brandon Haas; Kate Elvey

Appendix A: Assessment Advisory Council Call

At the recommendation of the Gen Ed Outcomes Assessment Task Force, the General Education Committee would like to put out a call for members of an Assessment Advisory Council (AAC). This council will work to create stability and consistency in the assessment of general education and help guide the General Education Committee in data-driven decision making. The AAC would refine the assessment model proposed by the Gen Ed Outcomes Assessment Task Force (?) and phase in assessment of Directions, Connections, Tackling a Wicked Problem, and InCap courses. We envision the work of the AAC to include facilitating on-going assessment of general education and implementing further pilot studies. This work will take place during the regular semester and summer. Off-contract summer retreat work will be compensated. The proposed council will consist of the General Education coordinator, a member of the General Education committee, the Director of Academic Assessment and Accreditation, and 3-5 additional faculty members.

If you are interested in joining the AAC or have further questions, please contact the Gen Ed chair(s) at Psu-general-ed-chair@plymouth.edu no later than May 10, 2019.

Thank you,
Brandon Haas and Kate Elvey
General Education Committee Co-Chairs

APPENDIX F:

Graduate Council
Chair, Clarissa Uttley
May 2019

The last meeting of the PSU Graduate Council for AY2018-2019 was held on Monday April 22. During this meeting, updates were provided by Academic Affairs, Admissions, Financial Services, and the Registrar's Office. We are in the process of reviewing a draft transfer policy and were asked to provide comments by the end of April. Admissions update included data that enrollments were down slightly for the spring term but up quite a bit for the summer term so far. Calendar and registration dates were also reviewed as were financial policies that could impact graduate students.

Respectfully submitted to the faculty,
Clarissa M. Uttley, PhD
Graduate Council Chair

APPENDIX G:

General Education Coordinator Report
May 2019

1. I have been working to make sure that everyone understands the changes we have made to the General Education program. In particular, I have updated the registration materials for incoming students as well as the Academic Catalog to include information about the Habits of Mind and the new First Year Experience class called *Tackling a Wicked Problem*. I have also been talking to the Student Success Coaches and the Admissions team and will soon talk to Orientation Leaders about these changes. If you would like me to talk to advisors in your discipline before the orientation sessions this summer, please let me know. I hope to have a helpful handout about these changes soon.

2. Robin DeRosa and I are working on the curriculum for the Cluster Pedagogy Learning Community whose work will start in May. The seventy individuals participating in the community will focus on ways that they can infuse interdisciplinary, project-based, and open learning practices into their teaching. We look forward to having the support of an instructional designer in the near future who will help with creating open, accessible ways to share our work with each other and the larger community.

3. PSU is sending a team (me, Abby Goode, Brigid O'Donnell, Elisabeth Johnston, Rachelle Lyons, and Sarah Parrish) to the Project-Based Learning Institute in Worcester in June. The goal of our work at the Institute is to develop an action plan to help the campus learn more about and engage more fully in project-based learning.

4. The First Year Seminar Steering Committee has been engaged in a number of assessment activities this academic year and the report of our findings are included as part of this month's agenda.

5. The INCAP Fellows are finishing the pilot offerings of the class and are working on a set of recommendations about how to move forward with the ideas developed and lessons learned through the pilot. We expect to send these recommendations to the General Education Committee for their last meeting of the semester.

6. Volunteers from the Arts and Technologies cluster are going to work on some ideas related to themed Gen Ed and the INCAP over the summer. If you are not part of the Arts and Technologies cluster but would like to participate in these conversations, please let me know.

Please let me know if there's anything related to General Education that I can help you with.

Thanks!
Cathie LeBlanc
cleblanc@plymouth.edu

APPENDIX H:

Assessment of IS1111
Report from the FYS Steering Committee
Brandon Haas, Elisabeth Johnston, Cathie LeBlanc, Rachelle Lyons, and Sarah Parsons

Introduction
Early in the transition to the cluster model, President Brix identified First Year Seminar (FYS) as a cornerstone tool for the cluster initiative. He wrote that the FYS should include a "challenge question" and an "interdisciplinary project experience." Because we already had an FYS in place before the president arrived, he envisioned our existing course could be used to "kick off our students' cluster experiences." As we modified our existing FYS to fit this new vision, we identified cluster pedagogy as a focus on interdisciplinary, project-based, open learning that challenges students to apply and articulate their learning.

To motivate students' interdisciplinary, project-based, open learning, the FYS sections each focus on a "wicked problem," which is described in the FYS Open Educational Resource (OER) as follows:

> A wicked problem is a cultural or societal problem that is difficult or impossible to solve. We might not have enough information about the problem to solve it or the information we have might be contradictory. The wicked problem might be connected to other wicked problems. Efforts to work on one aspect of the problem might create new, unforeseen problems. Different people might have different perspectives on the causes of the problem. Or the possible solutions to the problem might be prohibitively expensive and, therefore, infeasible. (https://psufys.pressbooks.com/)

The description of the FYS (IS1111) in the academic catalog is:
> In this class, students use a collaborative project development process to reach outside the classroom to address some aspect of a wicked problem. During this project process, students focus on the development and practice of the General Education Habits of Mind. The course culminates in a public event at which students share their reflections on their learning.

The learning outcomes of the course indicate that the student will:
· Understand the how the General Education Habits of Mind contribute to student success as learners and thinkers in college and beyond.

· Progress in personal development of the General Education Habits of Mind

· Learn about the complexities and challenges of the wicked problem and how to to explain them to other people

· Demonstrate the ability to recognize the need for information to accomplish a specific purpose in a particular context as well as to be able to find, evaluate, use, and properly cite that information.

· Engage in a project development process that includes at least one attempt to make a difference in the world related to your wicked problem and be able to explain to other people what was done.

· Explain how project development activities relate to the General Education Habits of Mind

The Habits of Mind represent the learning outcomes for the General Education program as a whole and the FYS is a place for students to practice the ways of thinking or engaging with the world. The Habits of Mind are: Purposeful Communication, Problem-Solving, Integrated Perspective, and Self-Regulated Learning.

Through working on a group project that attempts to address some aspect of a wicked problem, students are pushed to consider diverse perspectives of stakeholders and to find creative ways to effect change in the world beyond the classroom. The instructional approach in the class focuses on process rather than product or content. Instructors serve as guides to foster student interest and motivation as they explore the wicked problem and employ design thinking in developing their projects. The instructional approach also provides opportunities for students to practice problem-solving, integrating diverse perspectives and purposeful communication in a supportive environment to encourage creative risk-taking. There is a particular emphasis on developing the self-regulated learning mindset and skills with student choice built into the course at many levels. Students are challenged to articulate their learning to an audience beyond the classroom and consider the impact of their project work in the broader world.

In the Fall of 2018, 35 instructors taught 47 sections of the course to 1073 students. In Spring 2019, 7 instructors are teaching 7 sections of the course to 90 students. Appendix A contains a list of all the sections of FYS offered this academic year. Students in sections focusing on such topics as drug use, food insecurity, homelessness, equity in education, and so on worked on a variety of projects to try to address some aspect of the wicked problem.

FYS Fellows Learning Community

As in AY 2017-18, a key component of teaching the course is that the FYS Fellows formed a learning community in which they learn together about the key elements of the course. The FYS Steering Committee facilitated a variety of professional development opportunities during the spring and summer in preparation for the fall. These sessions including topics such as changes to FYS, what is a wicked problem, and developing a syllabus for FYS. In the summer, the Center for Project Based Learning from Worcester Polytechnic Institute (WPI) provided a two-day workshop focused on project-based learning. The workshop focused on understanding how to support students in project-based learning based on WPI's experience doing this work over the last 40 years. In addition, all FYS Fellows participated in monthly reflective practice sessions.

FYS faculty met in small groups for monthly sessions using reflective practice protocols to discuss challenges of teaching this course.

One of the goals of the learning community has been to develop common language and understandings about the FYS and what we are trying to accomplish with the course. The pedagogy we are using tries to truly shift the focus of the classroom from the instructor to the student. This can be challenging for both the instructor and for the students and we recognize that we have more work to do to support instructors in this shift.

Wicked Problems

Not all faculty had the benefit of attending workshops explaining what wicked problems are and so some of the sections offered in Fall 2018 were not sufficiently focused on wicked problems. To alleviate this problem, the General Education Coordinator has worked with faculty to define wicked problems for the Fall 2019 semester. In addition, the FYS Steering Committee created a survey that we sent to Fall 2018 students with the following question: "Imagine the best teacher you have ever had is offering a course at a time that is ideal for you. What wicked problem would you like it to focus on? List as many options as you like." Ninety-four respondents gave the answers shown in Appendix B. This list was given to instructors teaching *Tackling a Wicked Problem* in the Fall 2019 semester before they chose their wicked problems for their sections. In addition, we have added the above question to the course evaluation going forward in order to promote student voice in the choice of wicked problems offered.

First Year Residential Experience

For the Fall 2018 semester, an administrative decision was made to house incoming First Year students based on their First Year Seminar sections. The intention was to develop living-learning communities that bridge the gap between academic experiences and residential experiences as well as to provide targeted resources and community development opportunities for our newest students.

The FYS Steering Committee, in collaboration with Residential Life, considered how we might use the living-learning communities to provide authentic opportunities for the students to be able to talk about their work with someone from outside their particular section. To achieve this goal, each of the six first-year residential halls hosted an evening meeting for the students to meet with their peers and faculty other than their own instructor. At least one FYS steering committee member attended each of these meetings. Some students had positive experiences in these dorm events but the particular logistics of the meeting (when in the semester it occurred, how many instructors were present, the space in which the meeting was held) played a large role in whether the meeting was successful or not. From these experiences, we learned that overall this was not an effective initiative and so the FYS Steering committee has begun conversations about different ways that students and faculty across sections might interact outside of the classroom in a more meaningful way.

Housing students according to their FYS section came with challenges. The General Education Coordinator reviewed all the student course evaluations and although there weren't a huge

number of comments about this, all the comments about it were negative. This comment is typical: "[Y]ou should not be forced to take a class to try to room with someone that you want. [I]t would be more beneficial if you roomed with people outside of the class so that you can expected (sic) your circle of friends and get to learn about the different first year classes that were offered."

Students will no longer be housed according to their choice of wicked problem.

Common Assignment

Starting in Fall 2018, students in all sections of First Year Seminar completed a two-part common assignment. The common assignment was designed to provide students with the opportunity to present their work to an audience external to their class as well as to reflect on what they learned in working on their group projects, particularly related to the General Education Habits of Mind. The two parts to the common assignment are a poster to be displayed during a poster symposium and a reflective essay.

Poster

Fall 2018 sections of FYS participated in a poster symposium designed just for First Year Seminar at ALLWell North on December 5, 2018. Spring 2019 sections will present posters at the Student Showcase of Research and Engagement on May 2. These events provide students with an opportunity to share their work and to learn about the projects across all sections of the course. The goal is that student teams practice purposeful communication through public sharing of the work. This activity also served to promote peer-to peer discussion about insights they gleaned from participating in this type of project-based learning.

The posters created used a common template which asked students to describe the process of their project development, emphasizing the process and skill building rather than the summative product of their work. Students were asked to present information about the exploration, design thinking, and decision making that each group engaged in to identify the specific aspect of the wicked problem that they wanted to address through the collaborative work.

Reflective Essay

For the second part of this assignment, students individually wrote a reflection paper that articulated how their participation in class activities, their project(s), and their engagement in the Poster Symposium helped them to begin to develop and practice the Habits of Mind, which included examples of activities that the students completed and how those activities relate to the Habits of Mind.

The Poster Symposium yielded a couple of key takeaways. The need to have a more universal approach and expectations became evident. Secondly, we need a larger campus-wide shift to demonstrate appreciation of and interest in the work that students are engaging in.

Assessment Activities and Findings

The First Year Seminar Steering Committee engaged in a number of activities to assess the First Year Seminar.

1. The General Education Coordinator read all the course evaluations for all Fall 2018 sections of the course. It is clear that for some students, "learning" only happens when the class is set up more traditionally and is focused on content-related topics. Generally, students who were not comfortable with the format expressed thoughts such as these: "I thought she was going to teach more material rather than us doing all the research." and "I really thought it would have been more of a lecture where we actually learn but instead it was just like a big book report for half a year." And: "I thought there was going to be more teaching done in the class." The student then went on to say: "As I said above we didn't really do anything in the class. Some activities didn't really have to do with our wicked problem such as reflections, sticking notes on the board of our skills, etc. I wish it had been more like the traditional classroom style with learning, notes, etc. and then at the end having a poster to represent all that we've learned. Then we would've had a more meaningful solution to the problem." Clearly, this student's idea of "learning" doesn't include the team-building, self-realization activities that were included in their section of the course. Other students, however, expressed a decidedly different experience with the course. For example, one student wrote: "The most valuable aspect of this course was the fact that we were able to acquire different skills having to do with group work, reaching out for help, and planning projects to effectively portray what we learned." The most common answers to the question of what the student found most valuable in the course included project focus, working in groups, the Habits of Mind, design thinking, getting to know the instructor, time and project management, as well as some content specific things. "I really enjoyed this class because of the subject and experiencing independent learning." and "I think the most valuable part of the course was really having the freedom to choose the routes we wanted to go with the class." Oftentimes, the same instructor would get both kinds of comments from the same section of their course.

2. The FYS Steering Committee attended the Poster Symposium. The symposium was not as widely attended as we hoped when it was scheduled. Students expressed disappointment at the low attendance, both to their instructors and in the course evaluations. Part of the challenge of the symposium was the logistics of holding the event in AllWell North as students on the perimeter of the space generally received less attention. In addition, holding the event in the evening might have been the reason for so few faculty, staff, and administration members attending.

3. The FYS Steering Committee looked at electronic copies of all the posters created by students. The posters demonstrate that there are discrepancies in how instructors are guiding students to approach their wicked problem. Some sections had robust opportunities for outward facing projects, some with external partners, while other sections engaged in more of a traditional research-based approach without a strong project that attempts to make a difference. The course evaluations demonstrated that

some students recognized the vastly different expectations and projects across the sections.

4. The FYS Steering Committee asked all instructors to send us the instructions they gave students for completing the reflective essay as well as three sample essays, one representing high achievement, one representing average achievement, and one representing below average achievement. Although not all instructors sent us this information, we discovered that the essays were largely shaped by the specificity of the instructions given to the students. The wide variety of instructions made it challenging to compare essays across sections.

Tackling a Wicked Problem

The Steering Committee has recognized that there is a campus-wide issue with reimagining the First Year Seminar. It has taken multiple approaches over time and has imbibed a feeling of just being a course that students need to "get through," rather than a course that provides a deep and meaningful experience. Over the course of the year, we have thoughtfully approached the data and lessons learned from the First Year Seminar iterations that have used Wicked Problems as the focus. In order to move beyond the thinking of a "New" First Year Seminar, the Committee decided to develop an **entirely new** course based on our pilots of using Wicked Problems as the cornerstone of IS 1115 *Tackling a Wicked Problem*. This course serves as the foundation to the Cluster experience and the emerging campus-wide culture of Problem-Based learning. This new course has also begun the integration of the *Habits of Mind* as a means of engaging students in making this a normal part of their education at PSU.

The syllabus for IS 1115 has a general definition of Wicked Problems in order to give students some language from the start. The outward facing project has been reconsidered as the *Habits of Mind Project* and clearly states that the project *will not "solve" the wicked problem so that the problem goes away entirely. Instead, you will work collaboratively with other students in your class on one aspect of the problem to try to make a difference in the world.* A Habits of Mind Project OER is in development to give students and instructors a starting point to begin thinking and planning.

The course learning objectives were written based on our evolved intent for the course. They focus more on process and skills than on content-knowledge, while acknowledging that content understanding is crucial to a sound project that addresses the problem.

Next Steps

In addition to creating a new course to take the place of the First Year Seminar, the FYS Steering Committee has identified the following steps to continue to improve the new course.

1. The FYS Steering Committee shared the list of wicked problems generated by the student survey with potential *Tackling a Wicked Problem* (the course that is replacing the First Year Seminar in Fall 2019) instructors as they were deciding the wicked problems their sections would focus on.

2. The General Education Coordinator worked with each instructor of Fall 2019 sections of *Tackling a Wicked Problem* (TWP) to ensure that their section was focused on a problem that was actually wicked.
3. The lack of consistency in approaches to developing action-focused projects addressing some aspect of the wicked problem has been a concern. All TWP instructors will be part of this summer's Cluster Pedagogy Learning Community (CPLC). A focus of the CPLC work will be developing expectations about those projects.
   a. The Steering Committee will share a checklist of essential project elements.
4. We have begun conversations about new ways that students across sections might interact outside of the classroom in a meaningful way as well as how to support students in getting feedback from others early in their project development.
5. The poster symposium, held December 5 after a faculty meeting, had few attendees besides the students and their instructors. The Steering Committee requested and received permission to hold an event more like the Showcase of Student Research and Engagement during the day on the last Wednesday of classes in the Fall 2019 semester. All TWP students will present their work. All other classes (8am-3pm) on that day will be replaced by this event so that faculty and students can attend.
   a. The location of the poster symposium event across the river in ALLWell North posed another obstacle for attendance. The Fall 2019 event will be held in the HUB.
   b. The Fall 2019 event represents a campus-wide shift to demonstrate an appreciation of and interest in the work students are engaging in. Students will be invited to submit their work from all types of experiences to be part of this event.
6. The Steering Committee will create a more comprehensive description of the common assignment that instructors will not have to adapt before giving it to their students.
   a. The Steering Committee will create materials to support student understanding of project-based learning
   b. The Steering Committee will create a rubric for the poster.
   c. The Steering Committee will create a rubric for the reflective essay.

Appendix A: Section Wicked Problems and Descriptions

- Drugs in the US From current issues in marijuana decriminalization and legalization, to heroin overdose deaths across the US?and the epidemic in New Hampshire in particular?to the cost of mass incarceration, you have been effected by America?s drug policies. In this First Year Seminar we will explore the relationship between drugs, the law, and society. In order to explore this wicked problem, we will be asking questions such as: why are drugs illegal? Is addiction really something to be concerned about? How can we solve the issue of drug use in the US, either nationally, or locally? Why has heroin taken over the northeast and what steps can be taken to solve this wicked problem?

- Food, Food, Everywhere; Yet Not a Bite to Eat - Hunger and Food Waste: This course will explore how we feed ourselves, paying particular attention to the dilemma of too little food, too much food, and how this affects the health of people and planet. Students will investigate current practices in food production, composting, bio-digestion, emergency food services, nutrition intervention programs and waste diversion initiatives. Considering local, regional and global case studies of hunger and food waste students will delve into the complexity of this wicked problem. By connecting with multiple stakeholders on and off campus students in this course will develop action oriented projects to address the negative impacts of hunger and food waste. The course requires participation in a full day field trip and 5 independent service hours.

- The Pollinator Crisis: Many plants, including a wide range of crops, depend on insects to help them reproduce (by pollination). In recent years, concern has been rising that pollinators such as bees ? are in serious decline, and that this, in turn, will affect our lives. This wicked problem has both scientific and social components, and in this First Year Seminar we will explore questions including: Are we in the midst of a pollinator crisis? How can we evaluate this claim? What are the environmental causes of pollinator declines and what are the possible costs? What can we do to conserve these animals and the services they provide us?

- Gender Equity: In March 2017, The US Women's Hockey team demanded "Equal Play, Equal Pay", or they would boycott the World Championship Games. A temporary deal was reached and they won the World Championship. The US Women's Soccer Team has made the same demand; in 2015 the final game of the Women's World Championship, won by the United States, became the most watched soccer match in US history, more viewers than for the US Men's team. Still, neither team is paid as much as the men's teams are. Fair? The Equal Rights Amendment to the Constitution of the United States was originally introduced in 1923. It did not pass Congress until 1972, when it was sent to the States for ratification. What happened? It has not been ratified. What is going on? Should there be Gender Equity? What does that mean? How do we and the rest of the world approach this issue? Is there a "best" solution to the issue of Gender Equity?

- The Dark Side of Technology: Conventional wisdom suggests that technological progress beneficially enhances our lives and makes life easier; countering this optimism is increasing evidence of negative impacts. These consequences or `wicked problems include, for example, climate change, pollution, privacy issues, alienation and

communication and income disparities. As `digital natives we will explore the root ?wicked problem? of technology relative to global changes, sustainability and specific to their impact on ourselves, our community and our world. Throughout the term, we will challenge our assumptions and reveal these expected and unexpected consequences through research, dialogue and formal written and verbal presentations.

- The Happy Life: We all want to be happy, but what is happiness and how can we pursue a happy life? Philosophers, Psychologists, Economists, Marketers, Sociologists, and many more continue to explore these questions and many more. In this course, we will analyze what it means to be happy in our current society. The course will investigate the wicked problem of how one can go about having a happy life. Some of the questions we may consider are: Can money buy happiness? Is happiness a choice? Is happiness an ideal or can it be attained?

- Engaged Citizenship Civic engagement is the foundation of life in a democratic society. Voter turnout in America is extremely low compared to many democratic nations around the globe. However, being an active and engaged citizen is more than simply voting. This course will analyze what it means to be an engaged citizen in a democratic society. The course will investigate the wicked problem of fostering engaged citizenship in the United States. Some questions that we may consider are: What does it mean to be an engaged citizen? How can people make a difference? How can young people be change agents in society?

- "What is a Sustainable Campus?" Sustainability is a complex term used to describe a system or organization that describes its environmental, social, and economic impacts. What does sustainability really mean, and how do we decide what our goals should be? How can we work together to achieve them? Together we will explore the concept of sustainability and its applicability to our own lives and our community. The discussions, fields trips, and projects we engage in will help us determine how different groups can work as a community to define and achieve sustainability and we will apply that knowledge on our own campus.

- Can Tourism Save New Hampshire: Are the Economic Benefits of Tourism worth the Socio-Economic Costs? The Economic Benefits of Tourism may not be worth the Socio-Economic Costs: Can tourism save New Hampshire? Tourism is clearly important to New Hampshire's quality of life, supporting thousands of jobs, preserving cultural resources, providing amenities for residents, and generating much-needed tax revenues. A deeper look, however, raises a number of questions: Is tourism in New Hampshire too vulnerable to economic decline? Can tourism providers afford to pay a living wage to their employees? Will an influx of visitors threaten rural ways of life? Is tourism harmful to environmental sustainability? This seminar will explore this wicked problem, helping students think critically about the social, economic, and environmental foundations of tourism development, the scope of tourism resources in New Hampshire and North America, and the broader cultural perspectives surrounding tourism.

- Equity in Education? Questions about equity arise when discussing the over 50 million children that attend public prekindergarten-12th grade in the United States. During this seminar, we will explore the factors that influence access to quality public education.

Together we will explore various questions that emerge from class discussions about this wicked problem such as: What does equity mean in education? How have history, society, and politics influenced equity in public schools? What suggestions have educational reformers made to address this issue? Then we will consider ways that we might take action to address these concerns.

- Human Trafficking and Modern Day Slavery. There has been increasing attention to human trafficking nationally and globally since the turn of the century, however, in many ways this is a very old problem of commodifying and exploiting vulnerable populations. In this First Year Seminar, we will explore the origins of this wicked problem and ask questions such as: What is human trafficking and why does it exist? Who is most at risk for victimization? Do victims choose this life? What is the role of personal responsibility in determining if an act is human trafficking or not?

- What causes homelessness? What does homelessness cause? Homelessness can be understood as both a result and a cause of various individual and system-wide factors, best examined using an interdisciplinary approach. This First-year Seminar will examine issues related to homelessness among families and individuals at individual, agency, and system levels. Students who take this course will learn about homelessness and related issues through a multidisciplinary lens. Students will engage in learning about this social problem from multiple angles and complete a student project to better understand the causes and effects of homelessness on individuals within the broader context of agencies and society.

- Entrepreneurship as if the Planet Mattered: This course helps students become `climate change entrepreneurs by designing new social, business, and environmental ventures to combat global warming. Do you have a big idea and like to work in teams? As learning outcomes, you will identify opportunities, design and validate value propositions, build pretotypes (pretend-prototype), devise business models, and create storytelling.

- Language, Power & Propaganda It is comforting to associate the term of propaganda with war and dictators, which makes it less relevant to our daily lives. This view, however, fails to acknowledge the ways that propaganda permeates all aspects of our everyday life. This seminar class tackles the wicked problem of propaganda: What is propaganda and how does it differ from persuasion? How is propaganda manifested in the media? What is the relationship between propaganda and truth? What ethical dilemmas are entailed in the production of propaganda and the public's consumption of the information? What are the purposes and outcomes of propaganda campaigns?

- Art and the Natural Environment: Interested in Art? Interested in the Natural Environment? This hands-on project based class will question how art can bring awareness and change to environmental issues including climate change action and endangered species loss.

- "There Ought To Be A Law! Or Not?" Why are there laws? Do laws impact us from a personal point of view, or a societal point of view? Have we gone too far in protecting the few at the expense of the majority or not? Are there laws that seem unfair in terms of who they impact? Special attention will be paid to topics that have impact on multiple academic disciplines here at the University to help students make connections between

fields of knowledge and cross discipline points of view. Additionally we will look at the variables in society that have generated the need for laws. A significant level of analysis is expected as opposed to simple presentation of facts and theories. Laws or policies that we select together will meet the definition of wicked problems in that they engage social or cultural challenges that are nearly impossible to solve due to lack of understanding of the problem, stakeholders involved, polarized opinions on solutions, difficulty in measuring success, or that proposed solutions generate a host of competing issues and impacts.

- Child Abuse: Each year millions of cases of child abuse are reported in the United States. In this course you will be utilizing interdisciplinary thinking and the cluster based educational experience to define, investigate, and examine existing and potential solutions to this pervasive and devastating issue. You will engage in various methods of inquiry including critical thinking and design thinking, and will become skilled in Information Literacy as you work on a project as a team with students in the class or in the community to pursue those aspects of this topic which you find most relevant and engaging.

- Illiteracy. Can you read and write? Not everyone says yes to this question. In fact, almost 25% of the world's population is illiterate. This course provides an opportunity for participants to explore the impacts of reading and writing illiteracy on people and society. Questions such as what is illiteracy, how many people are illiterate, who are the illiterate, why are they illiterate, what are the impacts of being illiterate, what is being done about illiteracy, and what should we do about illiteracy will be used as a springboard for an in-depth discovery of illiteracy and its implications.

- Savage Inequities in Education Thirty years ago, Jonathan Kozol published the seminal book, *Savage Inequalities*, that exposed race and social class divides in US public schools and demonstrated the imbalance of democratic education introduced by the foundational educational philosopher John Dewey in 1916. Today, inequalities largely remain in education, with the addition of issues of inequity on the rise. Inequity in education goes beyond inequality, illuminating divergence based not only on race and social class, but also gender, sexual orientation, religion, politics, and community location. In this First Year Seminar, we will explore these dimensions of inequity through the following questions: How is inequity currently manifested in schools? What are the underlying beliefs and values that create inequity? How can we overcome inequity to promote democratic education for all?

- The Unintended Consequences of Technology The era of unprecedented sharing brought with it numerous side effects. Social networks connect us with both friends and cyberbullies. Our screens keep us entertained, but they also affect our sleep and behavior. E-commerce gives us both bargains and data breaches. Algorithms produce great search results as well as stock market crashes. Artificial Intelligence may give us self-driving cars, but will it eventually turn against humanity? Let's design possible approaches to these vexing problems!

- Good Sheeple Bad Sheeple. Are you being guided by a farmer in a herd of sheep or are you grazing alone in a pasture? Are we buying into the script for other people's

expectations or do we have an ear to our own purpose? Is it really that bad to be a follower? Shouldn't we all stop at the stoplight? In this First Year Seminar we will discuss topics such as- self-image, consumerism, the corporate mentality, and college. As a result, you will awaken and recognize the sheep within. Baaaaaaaaa

- TRIO scholar students ONLY - The Accessibility of Higher Education for Underrepresented Populations. In an era where the gap for access to a higher education widens between the elite and the rest of the population this First Year Seminar will explore questions including: What populations are underrepresented within higher education? What are the levels for determining eligibility of access to institutions of higher education? What is holding these populations back from achieving a higher education or even their ability to be accepted at an institution of higher education? Who is responsible for these barriers?

- Why Can't We All Just Get Along? We all have different ways of looking at the world and different priorities, but there is no reason that in spite of our differences, we can't create a space where we focus our energy on making a difference in the world we live in. In this section, we will work together to create a better understanding of what we believe while also listening to our classmates beliefs. Our goal will be to learn how to balance your priorities against those of your classmates in order to create a world where we achieve balance. We will take field trips, build bridges, knock things down and rebuild them to learn how to reach a goal together.

- Getting Tough on Crime: Education, Incarceration, & Rehabilitation According to the U. S. Bureau of Justice Statistics just over 2.2 million people are currently incarcerated with some 7 million under some form of correctional control. A 2016 analysis of federal data by the U.S. Education Department concluded that state and local spending on incarceration has grown three times as much as spending on public education since 1980. In this First Year Seminar, we will discuss education, incarceration, and rehabilitation and explore these questions: Does getting tough on crime really work? Would education be a better option? Does punishment deter crime? What about rehabilitation? How does prison effect the economy and families? Would abolishing prisons work? Should the death penalty still be used in the United States and if so why?

- American Racism: Research and recent polls demonstrate that Americans continue to have vastly differing perceptions and experiences of racism in everyday life situations. This First Year Seminar will examine the wicked problem of racism from a variety of interdisciplinary perspectives, most notably media/cultural studies, psychology, and law. Among the questions students might explore are: How are racial identities defined and represented? What have we learned from psychological research and experiments about racism? What can we do, as individuals, to help address the problem of racism?

- Is society's need for instant gratification destroying our health, relationships and work ethic? Does giving in to the desire of now lead to a less fulfilled life in the future? Is it better to seize the day, or is patience really a virtue? This seminar will evaluate what motivates people to strive for success and what factors lead to procrastination or reduced effort and persistence.

- The Wicked Problem of Addiction. "Each day, I cry/ Oh, I feel so low from living high." The 2013 Lady Gaga song Dope, talks about withdrawal from a lost love, but these lyrics could apply to anyone who is an addict. And there are many among us. In 2016, nearly 1.9 million Americans 26 years and older received treatment for alcohol abuse. That same year, 626,000 Americans reported an addiction to heroin. And there are other addictions you may never have considered. Addiction of any kind harms individuals, tears families apart, and weakens society. But while the consequences are easy to list, the causes and solution are not. This seminar will explore the wicked problem of addiction from a variety of perspectives to shed light what we can do as individuals to tackle the problem.
- Artificial Intelligence and the Future of Work Machines have been assisting us in our physical work for thousands of years, but with the advent of computers in the mid-20thcentury machines have begun both assisting and taking over cognitive tasks as well. As Artificial Intelligence (AI) enables machines to handle more non-routine jobs in areas of transportation, logistics, legal writing, financial services and even diagnostic health care some scientists believe AI poses a unique threat to human labor. Students taking this course will learn about the problem of AI and the future of work from a multidisciplinary lens, including computer science, political science, psychology, and anthropology. Students will engage with their fellow students to complete a project to better understand the causes and possible solutions to the future of work.
- Ocean Plastic: Plastic is causing an unprecedented change in our oceans. There is currently an estimated 150 million metric tons of plastic circulating in marine environments, and every year we add another 8 million tons to that amount. Aside from the obvious effects on marine life, plastic pollution also affects the economy, tourism, and fishing and aquaculture industries. In this course, through varied perspectives, students will seek to understand the causes of this problem, and the effects of plastic pollution on marine ecosystems, the global food chain, and human health. Collaboratively, students will draw connections from multiple fields to explore possible interventions.
- Are the US and China economic frenemies? China and the US have a love/hate relationship. Disagreements abound, yet the two countries depend on each other, especially economically. The current administration claims the main problems with the U.S. economy are the Big Trade Deficits, which is mainly with China. Can the US and China overcome the differences to become close friends and collaborators? In order to approach this wicked problem we will explore many aspects of China-US economic relationships and try to analyze their effects/influences/outcomes/results by asking questions such as: Who benefits/suffers from China/US economic relations and polices? Who opposes/supports China/US economics relations? How do the US and China compete and rely on each other economically? Can protectionism cure the trade deficit with china? Are there unfair trade barriers causing trade deficits between the US and china? Is America losing its competitiveness? Do Trade Deficits mean lost jobs? Is the trade deficit between China and the US a drag on Economic Growth? How does China manage its currency? And finally, as wages and other costs in China are on the rise, can

the Middle Kingdom maintain its dominance as the world's largest manufacturer? Students will mind-map the fields regarding the China/US economic relations that they are interested. Such as Education, Environment, Intellectual Property, and Entertainment Etc.

- Social Justice: Social injustice involves unfair practices being carried out against a group or an individual that is part of a group. It is often comprised of a range of activities, including the suppression, abuse, isolation, misuse, and, in certain instances, annihilation of a group. Often these activities are supported by a government and affirmed by legal statutes. U.S. history alone offers many occurrences including slavery, the taking of Native American lands, imprisonment of Japanese-Americans during World War II, exclusion of Chinese immigrants in the late 19th century, and in the early 20th century, the forced sterilization of those who were deemed "feebleminded and socially inadequate." Why does social injustice exist and is there a remedy? Where is social injustice being practiced today? What's the best way to battle social injustice? Should we even care about it? Can it be stopped or is it something we should simply accept, and if we do, is there a price to pay for such acceptance? (Small-group initiated media or performance projects will be required.)

- How do we as a country provide quality education to all students? What inequities stand in the way and how do we solve them? In this course we will unpack the multitude of issues surrounding the inequities in education, the possible roadblocks that hinder progress and the steps necessary to narrow these gaps. Students will be encouraged to think critically and constructively about each roadblock/issue within the overall Wicked Problem and discuss their conclusions and future questions with the class.

- Rising Up Against Stigma: We live in incredibly complex times. We have access to incredible amounts of information at our fingerprints (or thumb taps). Media activates, deactivates, unites, and divides us in ways unimaginable even 5 years ago. As our technologies enhance and evolve at rapid speeds, humanity shifts and churns at slower rates. We are encouraged to take things at face value and make judgments quickly. These actions fuel a societal machine of stigmatization. We continually see reports of discrimination against others, exclusion due to disabilities and other personal diversities, rising suicide rates, mental health crises, public shootings, shaming and bullying others, and alarming accounts of domestic and sexual violence. Together, we can shed light on these intricate problems, use our technologies to augment our messaging, and promote breaking down the stigmas that proliferate our human experience.

- Can the masses lead a sustainable life in this competitive, convenience-driven, comfort-seeking, 21st century? What factors hinder or facilitate this to be a reality? Human innovation and brilliance has helped us lead convenient, comfortable, fast-paced lives. However, depletion of natural resources has also been a result of our human living. The differences in the access to resources, population growth, poverty, and other social issues do not help this either. In this 21st century, where each one of us are driven to succeed, and are used to the convenience of access to disposables, how can we design large-scale sustainable living? Where is the space to integrate conscious, mindful living in our busy, stressful, deadline based schedules?

- Water, Water Everywhere and Not a Drop to Drink Thirsty? Ever wondered what is in that water you are sipping? How do you know it's safe and healthy to drink? Will there be a day when nothing comes out the tap? Nearly 850 million people in the world do not have access to clean drinking water. We will explore the multiple interests and roles of watershed users and their effects on the water system. Students will create a project that will aim to impact the lives of watershed users, be it industry, agriculture or homeowners. The scope of challenges in managing drinking water involve government policy, politicians, industry, agriculture and homeowners. All parties must work together to maintain a healthy, safe, fresh water supply.

Appendix B: Student Responses to Survey Question

Things about today's society that affects each one of us

The affects of the media the homeless

Prison system

Maybe something on natural disaster outcomes and relief something about animals

Homelessness abortion climate change women gender inequality unequal. pay (in sports or normal people)

Health in america

Happiness stress things to actually help us in college

Why did vine die?

What roadblocks are in society's way as we move to the future Is humanity ready for extraterrestrial life?

What can be done to combat homelessness?

The sheeple mindset

The longterm mental effects of everyday technology (computers, phones, televisions) Climate change and what we can do to stop it

The effect of technology on government, especially with the emergence of surveillance technology and "deep fakes." How do we stop the people who think creating this kind of technology is okay? Should technology be restricted by the government? How far is technology allowed to go?

Something to do with conservation of the earth. That is really important right now.

Societal issues: abuse, violence, racism All the ugly stuff we don't normally talk about in schools.

Social Justice

Save the bees, climate change,

Same answers as above, focused on NH outdoors/tourism economies.

Reinvent the first year seminar, it is not well put together and needs lots of work. That should be the wicked problem

Real Life Skills Everywhere else compared to America

Racism in today's society; Plastic in our oceans water

Racism in America

Problems in the education system! things such as how grades define who you are which cause kids to cheat

Pollution, energy waste, food waste, animal abuse, current issues

Politics

Personally, I would not continue the Wicked Problem line of thinking, especially where it concerns the symposium. It was poorly planned, executed, and, in general, simply a way to fulfill an elective credit - although not the most engaging way. If forced to attend yet another course, I would use the same or similar topic to the class I attended prior.

PTSD among veterans; Veterans wounded in combat and giving them an affordable way to take care of themselves giving veterans a smooth transition back home; Homeless veterans; Overall homelessness; Mental Health

Ocean plastic; Equality in education

Ocean Plastic, Sustainability, Child Welfare

Nutritional wellbeing; Mental health in students

Nothing.

None because the first year seminars are pointless

Mythical Creatures, Disney, Tv Shows,

Music/Art in schools, world hunger, sustainability, litter, vegitarianism/veganism, where food comes from; Money, American is in debt like crazy and no one, including the school system knows how to teach average people about money. That is a wicked problem

Mental health Addiction Poverty

Mass Incarceration Police Brutality Climate Change (global warming, rising sea levels)

Longer maternity leave for female teachers; The importance of the arts in schools

Instant Gratification

I'd like to focus on unaccredited and low-income schools. What are the challenges their students face when applying to colleges? How does standardized testing affect them? Do they have a lack of resources or more rescores?

I would like to learn about different ways to grow foods.

I would like to focus on: more ways for the GAP different mental illness and the effects on that

I would like to focus on the problem "Why can't we get along"

I would like to focus on murderers

I thought the wicked problem thing was kind of silly. It made it so everyone in the class was working on different things and they weren't even things we were passionate about, and they had no answer so the whole poster was pointless.

I feel as if education is one of the most crucially debated topics in the world cause it is important.

I enjoyed this wicked problem

Human Trafficking, Social Injustice, Poverty/Homelessness

Homelessness - again Mental health and society Eating disorders and society Climate change LGBTQ+ issues Domestic violence Restorative justice

Health Literacy - How can we improve patient awareness and education to ensure that patients are actually understanding what healthcare professionals are trying to explain to them? Mental Health - How can we improve access to mental healthcare for those who are struggling with mental illnesses?

Childcare Accessibility - How can we make quality childcare more affordable and reasonable for parents? Toxic Stress & Child Development

How can we decrease the impacts that toxic stress have on children and their development?

Gun control Legalization of Marijuana Death Penalty

Government accountability and transparency/corruption

Global warming, the virus epidemic

Global warming School shootings Personally I loved the idea of my seminar class picking a law to focus on even though I think my group should have picked a different law

Gender quality higher edu for under represented pops something to do with clean energy use at schools

Gender discrimination Criminal problems Drinking on college campuses Sports teams

Fracking Air pollution Better reusable energy Decrease in green spaces Ineffective government Political corruption Decrease of college students

Feminism/sexism LGBTQ+ Music & the arts

Feminism / Masculinity Issues Mental Health Eating disorders

Fake News impact Immigration issues and the effects of a wall Income inequality. Why the middle class is struggling and how to fix it.

Factory farming Rainforest deforestation

Environmental sustainability Environmental protection Renewable energy/ fossil fuels Two party system in the US/ bipartisanship Voting and the electoral college

Drug addiction in NH High cost of college in NH Funding and taxes in NH Transportation in rural NH Aging population in NH Climate change in NH (shorter winters in a state that is dependent on skiing)

Downfall of the ski industry

Does nationalism make us toxic?

Digital explosion

Coral bleaching Global warming

Climate change, as that is what I signed up for in the first place.

Climate Change Income Inequality Famine/Food shortages Drugs, especially opioids/War on drugs

Climate Change Environmental protection New Hampshire Economic issues

Bees, plants, environmental science, more modern and relevant topics to majors offered and not so much random topics of things that could be researched. Maybe have more relatable issues to minors as well, just so any student can choose a class that may be similar to big focus areas or just minor interest areas.

Addictions was an awesome class to take, especially entering into the new world of college

Anything that [instructor x] is teaching is something that will peak my interest. He has a passion for his students like no other teacher at the school. He can create interest from his students in any topic, whether that is NH's economy or smartphones he finds a way to make us infatuated with it. (Note that this answer was edited to remove the particular instructor's name.)

Addiction or Disorders

Addiction (It was a great class) sex trafficking hunger worldwide climate change technology on teenagers/children

Abuse and Neglect in the United States Discrimination in sports between genders Gender discrimination in the work place

Abortion Climate Change Immigrants Gender Equality

Terrorism -climate change/pollution -Femicide (on a global level)

Abortion -racism -terrorism -gun laws -demands in nurses -legalizing marijuana - heroin epidemic

Drug and alcohol abuse -issues faced in developing countries -world hunger -poverty

Anxiety in college students - Photography - Poverty in America

APPENDIX I:

Motion from the General Education Committee
(Language to be removed has a ~~strikethrough~~)

7. **General Education Committee**

    a. **Composition**

A Principal Academic Affairs Officer or Designee (voting), two students selected by the Student Senate, Registrar Designee, and six elected faculty members. ~~All elected faculty members must be from different departments.~~

Selection: To fill yearly vacancies, each department not represented or losing representation will present the name of one nominee to the Nominating and Balloting Committee. Election is by majority vote of the faculty of all those present and voting. Replacement members are chosen as needed by the same procedure to serve out unexpired terms. Temporary replacement for individuals on sabbatical leave is done jointly through appointment by the Chair of the Committee and the Faculty Speaker. Regular elections are held in the spring according to established faculty procedures.

Term of Service: Elected faculty members serve three year terms and are considered representative of the whole faculty. Two faculty will be elected every year.

In addition, the Faculty Speaker shall appoint a faculty member to be a non-voting participant on the committee for a one-year, non-renewable term. This member shall be selected from a pool of faculty with not more than five years' service at PSU.

Chair: The Chair of the Committee, who shall be a faculty member, is selected annually by the members.

APPENDIX J:

Intellectual Property Policy Draft

I. **Purposes and Objectives**
    The purpose of this policy is to encourage flexibility for the Plymouth State University (University) community toward the dissemination of research results, the creation and development of Intellectual Property (IP) for the public benefit, and the recognition of the creators of such IP. Specifically it will:
    1. Encourage the creation, development, and management of IP in the best interest of the Creator(s), University, external research sponsors, if any, and the public;
    2. Provide for protection of IP through legal mechanisms such as Patents, Copyrights, and Trademarks;
    3. Ensure that monetary and/or other benefits derived from IP are equitably distributed to the Creator(s) (*see Sect. III. 3.*), University, and other parties as appropriate;
    4. Address ownership issues related to IP developed at or on behalf of the University.

II. **Application of Policy**
    This policy applies to all members of the University community (Covered Individuals) including, but not limited to, University employees (including administrators, faculty and staff), students, and non-University personnel in the course of their University responsibilities and/or use of University resources not available to the general public, including funds, effort, facilities, and equipment.

III. **Definitions**
    1. Copyright and Copyrightable Works mean "original works of authorship" fixed in a tangible medium, including artistic works, course and teaching materials, and scholarly and academic works, and the legal mechanism to protect such works. Among other rights, Copyright prohibits copying or reproducing the work or any substantial part of the work without permission.
    2. Covered Individual is any faculty member, staff member, student, visiting scholar, or any other person at the University involved in carrying out the University's mission at or under the auspices of the University.
    3. Creator(s) means any inventor, developer, or author, of IP covered by this policy, including faculty, staff, and students of the University.
    4. Creator-Owned Intellectual Property means IP owned by the Creator(s) and includes IP unrelated to a Creator's University employment responsibilities or field of study and that is developed on their own time and without Significant Use of University Resources (*see Sect. III. 12.*). Traditional Scholarly Works, including pedagogical, scholarly, or artistic works by University faculty, staff or students, are also considered Creator-Owned IP (e.g.

books, course materials, compositions, visual arts, dramatic works, and refereed materials) unless created as a Work for Hire, as Sponsor-Supported IP, or as assigned in the scope and description of employment (*see Sect. IV. Principles of IP Ownership*).

5. Intellectual Property (IP) means any intangible products of creative efforts, including works that may be protected by a Patent, Copyright, or Trademark, as well as other tangible research property. IP includes but is not limited to artworks, literature, musical processes, new or improved devices, electrical circuits, databases, software, and innovative uses of existing inventions.

6. Intellectual Property Advisory Committee (IPAC) means a University committee whose purpose is to assess and advise the Creator(s) and University on issues concerning IP development, ownership, disclosure, applications, and technology transfer/commercialization. The IPAC typically includes the Director of Research & Innovation, Director of Research Administration, Chair of the Faculty Welfare Committee, and two other permanent members of the University faculty or staff. The Provost shall appoint the members of the IPAC to serve two-year terms from the date of appointment; there are no term limits. Meetings of the IPAC shall require a quorum of a majority of members.

7. Intellectual Property Officer (IPO) means the IPAC member appointed by the Provost with the responsibility of overseeing and administering the University's IP program in accordance with this policy and for administering Patents, Copyrights and Trademarks related to Creator-, University-, and Sponsor-Supported IP.

8. IP Disclosure Form means a form completed by Creator to disclose Intellectual Property to the IPO. Completion of the IP Disclosure Form by the Creator is required for University-Owned IP and voluntary for Creator-Owned Intellectual Property. The IPO maintains the IP Disclosure Form.

9. Net Income means the amount of money received by University from licensing following deduction of expenses associated with the University-Owned Intellectual Property.

10. Patent means a grant by the US Patent and Trademark Office of exclusive right for an invention, including discovery of a process, machine, manufacture or composition of matter, for a limited time. Generally, three conditions should be met for the granting of a patent: the invention or discovery should be novel, useful, and non-obvious.

11. Public Disclosure means verbal or printed disclosure of IP which includes abstracts, manuscripts, conference presentations, and, in certain instances, seminars and grant proposals, funded or unfunded. Public Disclosure may jeopardize the ability to secure a Patent on the IP.

12. Significant Use of University Resources means use or provision of support, facilities, or services, including staff or administrative assistance not available to the general public. Examples include special resources, use of laboratory, studio space, and/or specialized college-owned equipment, or special financial assistance. The IPAC shall make the final decision on whether Significant Use of University Resources was used.

13. Sponsor-Supported Intellectual Property means IP created under a grant, contract, or sponsored research agreement with an external agency or entity, unless otherwise specified in an agreement.
14. Trademark means, and as recognized by Federal and state laws, any word, name, symbol, or device adopted and used by an individual or a corporation to distinguish its goods or services from the goods or services of others.
15. Traditional Scholarly Works means pedagogical, scholarly, or artistic works created by Covered Individuals. Examples include books, course materials, compositions, visual arts, dramatic works, software, and referred materials, as well as student theses, dissertations, papers, and journal articles.
16. University-Owned Intellectual Property means:
    a. IP, including Works for Hire, that is specifically commissioned by the University or that an employee is assigned to create in the course and scope of their employment at the University;
    b. IP created with Significant Use of University Resources including funds, effort, facilities, and equipment;
    c. IP assigned to the University through contractual agreement;
    d. Sponsor-Supported IP that is designated as University-Owned IP in the applicable grant, contract, or sponsored research agreement or for which ownership has not been specifically designated, unless otherwise specified by agreement;
    e. IP that would otherwise be designated as Creator-Owned IP but that the University pursues IP protection and/or marketing, unless otherwise specified by agreement.
17. Voluntary Disclosure means verbal or printed disclosure of Creator-Owned IP by the Creator to the University in order to petition the University for assistance with protection and/or marketing of the IP.
18. Work for Hire means the work is prepared by an employee specifically hired or required to create it, is commissioned by the University pursuant to a signed contract, or it fits within one of the categories considered Work for Hire under copyright law, 17 U.S.C §101 et seq. In Work for Hire situations, it is intended that the University and employee sign a contract which addresses the ownership of IP before the project begins. Generally, the University will not claim ownership rights when the IP is embodied in Traditional Scholarly Works, even though the work may have been prepared within the scope of employment and University resources were used. This exception does not apply when the work (a) is created by someone who was specifically hired or required to create it, (b) was specifically commissioned by the University, or (c) is otherwise addressed by another section of this policy or in a separate contract. Traditional Scholarly Works are generally not considered Work for Hire.

IV. **Principles of IP Ownership**
1. For the avoidance of doubt, the University does not claim ownership of Traditional

Scholarly Works *unless that work constitutes a Work for Hire or is otherwise described in Sect. IV.3.*

2. Traditional Scholarly Works are owned by the Creator(s) who is free to exercise their Copyright, including registration, and to receive any revenues that may result therefrom.

3. It is the policy of the University that all rights in Copyrightable Works shall remain with the Creator(s) unless:
   i)   The Copyrightable Work is created pursuant to the terms of a University agreement with an external party and the agreement specifies ownership in the resultant works;
   ii) The Copyrightable Work is created as a Work for Hire. Works of faculty are assumed not to be Work for Hire unless agreements with the involved faculty explicitly designate specific works as such; or
   iii) The Copyrightable Work is also patentable and/or is associated with a University Trademark. The University reserves the right to pursue multiple forms of legal protection concomitantly if available. Computer software and/or its embodiments, for example, may be protectable by Copyright, Patent, and/or Trademark.

3. Traditional Scholarly Works of students created in the course of their education, such as theses, dissertations, papers and journal articles shall be considered Creator-Owned Intellectual Property.

4. Ownership of Sponsor-Supported IP, including Copyrightable Works, is determined in accordance with the terms of the grant, contract, or sponsored research agreement. In the absence of contract terms that specifically designate ownership, Sponsor-Supported IP is owned by the University.

5. Notwithstanding any other section herein, Copyrightable Works that are teaching materials developed by a Covered Individual specifically for the University shall be considered Traditional Scholarly Works, provided, that the University shall have a non-exclusive, royalty-free, and perpetual license to use any such teaching materials for research or instruction purposes.

V.   **Consulting Agreements**

The University encourages faculty to develop research relationships through the University as opposed to pursuing independent consulting arrangements. University employees must ensure that the terms of their consulting agreements with third parties do not conflict with their duties to the University. Specifically, the scope of any such consulting services and the ownership of any resulting IP should be consistent with the faculty member's duties to the University and must be disclosed to avoid conflict of interest (*see Sect. 2.11 Financial Conflict of Interest of the PSU Faculty Handbook, 5/2/18*). The University will not negotiate any independent consulting agreements on behalf of a faculty member. Any questions regarding the University's policies may be directed to the IPO.

VI. **Disclosure**

1. Required Disclosure to the University
   a. Covered Individuals must promptly report any University-Owned or Sponsor-Owned IP to the IPO. The IP Disclosure Form for such reporting may be obtained from the IPO.
2. Voluntary Disclosure to the University
   a. A Creator is not required to disclose IP that clearly constitutes Creator-Owned IP but must make disclosure if there is any question about ownership.
   b. Creator-Owned IP must be disclosed to the IPO if the Creator intends to request University resources for activities such as legal protection of the IP, marketing assistance, and other related efforts.
3. Public Disclosure
   A Public Disclosure of IP (e.g. conference presentation) before the filing of a patent application may restrict the ability to obtain a Patent for the IP. Covered Individuals should not publicly disclose IP before discussing this matter with the IPO. Disclosure to the IPO does not constitute Public Disclosure.

VII. <u>Commercialization</u>

Upon receipt of an IP Disclosure Form, the IPO will discuss the IP with the Creator and brief the IPAC. The IPAC will decide whether to pursue a Patent or other legal protection for the IP. The IPAC will consult with any previously retained IP or commercialization-related consultants and decide whether, and how, to pursue commercialization of the IP, including as appropriate, by researching the market, developing a business plan, negotiating terms of licenses and distributing royalties in accordance with this policy.

VIII. <u>Royalties</u>

Net Income received by the University for commercialization of University-Owned IP will be distributed as follows:

- 50% as direct payment to the Creator(s); and
- 50% to the University for support of research and scholarly activity.

IX. <u>Appeals</u>

Upon request in writing by the Creator, the Provost shall consider an appeal of a determination made under this policy. In discussions with the Creator and IPO, the Provost shall resolve any dispute raised under this policy. The decision by the Provost regarding any dispute shall be final.

Effective date: March 30, 2019