Undergraduate Outcomes Assessment Committee
Annual Report 2020-2021

Committee Members: Jianyu Liang (ME, Chair), Qi Wen (Physics), Chrys Demetry (Morgan Center for Teaching and Learning), John Bergendahl (CEE, Secretary in B20), Oleg Pavlov (SS&PS, CAP representative in A20, Secretary in A20), Emily Pimentel (SGA representative), Rajiv Malhotra (Institutional Research, A20-C21), Art Heinricher (Provost's Office), Kate McIntyre (H&A, Secretary in C21), Khalid Saeed (SS&PS, CAP representative in B20-D21, Secretary in D21)

In AY 2020-2021, the Undergraduate Outcomes Assessment Committee worked on the following tasks:

1. **The ethics outcome and assessment plan, in response to the recent changes in ABET criteria.** UOAC studied potential sources of data for ethics assessment, including the National Survey of Student Engagement (NSSE), ethics in the MQP reviews of each WPI program, IQP and MQP survey data, including student surveys and advisor surveys, specific information on ethics from the latest ABET self-study reports, data from surveys conducted by Educational Benchmarking Inc. (EBI), and the alumni survey. It was noted that the ABET data is difficult to use because there is not a discrete section addressing ethics. While WPI has a university-wide ethics undergraduate learning outcome, voted on and approved by faculty, WPI is not capturing this data at an individual course level but, rather, through IQP and MQP surveys. However, IQP/MQP surveys themselves are not currently usable: While IQP and MQP student learning and advising data is being captured, in the changeover to eProjects 2.0, faculty lost access to this data. UOAC worked with the Office of Institutional Research to revise the alumni survey and expects the data from the next implementation of the revised alumni survey to be helpful.

   UOAC also discussed using student course reports to get multiple sources of data and adding students' perceptions of ethics learning by more direct measures. UOAC reached out to the dean of students for information and discussion about trends in integrity issues, relative to the report on academic integrity. UOAC will keep collaborating with relevant offices to obtain access to needed data, once they become available to UOAC. UOAC thanks Pam St. Louis from the office of the dean of engineering for joining UOAC as a guest in B20 and C21, sharing her experience and providing access to information about ABET accreditation.

2. **Self-assessment report for NECHE accreditation.** UOAC worked with the graduate studies office and collected learning outcomes and assessment information from every undergraduate and graduate program at WPI, using the NECHE "E-series" form. The collected information was provided to WPI's NECHE Engagement Committee to develop the self-assessment report for NECHE accreditation.

3. **Foundational skills and WPI's next strategic plan**. UOAC discussed the information shared by the president's office on WPI's next strategic plan and invited the Foundational Skills subgroup to participate in discussions. UOAC learned about the work being done by the Foundational Skills planning subgroup and discussed implementation and integration of its goals throughout the curriculum, without adding to the stress of students, as well as the need for cultural change at WPI, and the possibility of refreshing the undergraduate learning outcomes to align with timeless skills. UOAC believes that a broader conversation with the faculty will be essential.

4. **Student's learning with changes in course delivery modes during the pandemic**. UOAC discussed many factors that influence student learning, with online and hybrid learning as the prevailing learning methods, including the importance of the ability to adapt to a changing landscape in learning, the need to facilitate a transition back to the physical classroom, the importance of time for reflection in courses, the role of ethnic and gender differences in the adaptation process, and articulation of the primary goal of teaching – to cover material or to train students in methods and techniques that will allow them to tackle new, unforeseen challenges.

5. **The Office of Institutional Research member on UOAC.** The WPI Faculty Handbook states that the director of institutional research is an ex officio member on UOAC. With the recent changes in the office of institutional research, with some of its functions being conveyed to the Strategic Initiatives group, UOAC discussed inviting a representative of the Strategic Initiatives group to UOAC meetings, as needed. Any recommendations for changes in UOAC membership were deferred for future clarification and discussion.