AC01: Academic Courses - analysis methodology

- 1. UMaine faculty and staff are required to report the courses they teach each year in the UMaine Faculty/Staff Profile (FSP) Database.
- 2. When courses are submitted, faculty/staff have the option to check a box if the course is sustainability related.
- 3. UMaine Office of Sustainability gained access to the FSP database. We were able to pull out all 2016-2017 academic year submitted courses that were tagged "sustainability".
- 4. We removed the following types of courses from the dataset:
 - a. Undergraduate thesis courses
 - b. Graduate thesis courses
 - c. Honors directed study
 - d. Independent study
 - e. Independent research
 - f. Internship
 - g. Special topics courses
 - h. Field experience courses
 - i. Courses with enrollment of 4 or less students
- 5. To handle courses taught by multiple faculty or that had multiple sections, we removed:
 - a. Duplicates of courses that were taught by multiple faculty i.e. one course was in the database 2 times because it was taught by two faculty these were kept in the dataset for Part 2 (departments with sustainability courses) in case the faculty were from different departments.
 - b. Multiple sections of the same course taught during the SAME semester
- 6. We chose to keep:
 - a. Multiple sections of the same course taught during DIFFERENT semesters
- 7. Courses were labeled as undergraduate (UG) or graduate (GR) based on the course number all courses numbered < 500 are UG and all courses number > 500 are GR.
- 8. For UMaine, departments are named units. There are 39 different academic units. These DO NOT include research units (ie. Climate Change Institute, Darling Marine Center) or the Cooperative Extension.
- 9. Once courses were compiled, we created a "how this course relates to sustainability" description. We used the following process:
 - a. Look up the course description in the course catalog and take any relevant information from that description.
 - b. If it is not clear from the catalog how the course relates to sustainability, reach out the the responsible faculty for a brief description.
 - c. Work with faculty to create an adequate description.
 - d. If the faculty do not respond after multiple contact attempts, remove the course from the inventory.
 - i. This method resulted in \sim 60 courses being removed from the inventory. Some of these courses likely are sustainability related, despite the lack of response from faculty.

- 10. To compare sustainability related courses to total courses offered, we also pulled out the record of all courses taught in 2016-2017 (obtained from the Office of Student Record: https://studentrecords.umaine.edu/). We filtered these courses in the same way we filtered the sustainability tagged courses.
- 11. We removed the following types of courses from the dataset:
 - a. Undergraduate thesis courses
 - b. Graduate thesis courses
 - c. Honors directed study
 - d. Independent study
 - e. Independent Research
 - f. Internship
 - g. Special topics courses
 - h. Field experiences
 - i. Duplicates of courses that were taught by multiple faculty i.e. one course that was in the database 2 times because it was taught by two faculty
 - j. Duplicate sections of the same course taught during the SAME semester

Overall assessment of inventory: This inventory is likely an underassessment of sustainability-related course offerings at UMaine for a number of reasons:

- 1. This assessment only looks at courses offered during 1 academic year. It excludes courses that are taught intermittently if they weren't taught in 2016-2017.
- 2. This assessment depends on the voluntary self-reporting of courses by faculty. There may be courses related to sustainability for which the faculty did not know to choose to select the "sustainability related" tag in the FSP database.
- 3. This inventory excludes courses that had enrollment of 4 or less students. This likely had a larger effect on the graduate course offerings since these tend to have fewer students.
- 4. The difficulty of working with faculty to create sustainability descriptions meant that a number of sustainability-related courses were excluded.
 - a. This was exacerbated by the fact that we were inquiring about courses taught two years ago. Some faculty no longer teach at UMaine, others no longer teach that specific course.