**ASCC Natural and Mathematical Sciences Subcommittee**

Approved Minutes

Wednesday, April 3rd, 2024 8:30AM – 10:00AM

CarmenZoom

**Attendees**: Barker, Cole, Dinan, Hamilton, Lee, Neff, Ottesen, Steele, Vankeerbergen

**Agenda**

1. Approval of 3-20-24 minutes
   1. Lee, Cole; unanimously approved.
2. Molecular Genetics 1103 (new course requesting GEN Foundation Natural Sciences; will also have GEL Natural Science—Biological Science) (return; tabled from last time)
   1. The Subcommittee would like to express to the department that they believe this is an excellent course as a whole and offer the following feedback in terms of the GEN Foundation requirements.
   2. The Subcommittee would like to point out the implications of referring to the non-lecture sessions of the course as “recitations”. A recitation has a different academic meaning than a lab, with the former focusing on discussion and understanding of the lecture material and the latter focusing on hands-on, practical applications. If the department is intentionally avoiding referring to these sessions as labs, the Subcommittee requests that they use a different word in the syllabus instead of recitation (e.g., workshop) that does not have an existing meaning for students, faculty, and staff at Ohio State. However, though the department can do this in the syllabus, “lab” will need to be selected in the course components section of the submission form in curriculum.osu.edu. If the department objects to this and intends to use the session as a true recitation by definition, then this causes additional issues regarding the 1-credit hour equivalent of experiential learning required of GEN Foundation: Natural Sciences courses.
   3. The Subcommittee notes that the explanation of the Foundation ELO 2.3 in the syllabus [p. 4] references discussions, which is not considered experiential learning and does not help to satisfy the 1-credit hour equivalent experiential learning component of the course. The Subcommittee requests a more detailed explanation of the activities that will be conducted in these recitation/lab/workshop sessions and how students will be regularly required to complete hands-on work in some way or another (e.g., lab work, collecting and working with data, using scientific tools to solve practical problems, etc.). Additionally, the Subcommittee notes that the GE rationale form and the in-syllabus explanation for the Foundation ELO 1.3 [p. 3] mention that students will be observing plants in the wild throughout the semester in order to satisfy the experiential learning expectations, but these activities do not seem to be a consistent part of the recitation/lab/workshop sessions. The Subcommittee asks that the department expound on the work that students will be conducting during these observations and that the department integrate this work into the course schedule more often, especially if it is the main activity intended to satisfy the experiential learning component of the course. The Subcommittee stresses the importance of more weeks of recitation/lab/workshop spending time on such work, as teaching the scientific method and initiating discussion do not achieve the same goals as hands-on experiences. Though discussion can certainly remain a part of the course and even a part of the recitations/labs/workshops, the Subcommittee would like to see the majority of these sessions (more specifically, at least 10 of the 14 weeks) focused on hands-on work such as the plant observation activities or similar.
   4. Regarding how at least 25% of the course involves experiential learning, the Subcommittee notes that the points assigned to the readings and media of the course do not contribute to this calculation (as they are not considered experiential learning). Given this, the Subcommittee continues to struggle to see how the 25% of experiential learning is accounted for and requests that the department provide additional clarification on the breakdown of this percentage.
   5. It has come to the attention of the Subcommittee that the Department of Evolution, Ecology and Organismal Biology offers an existing course with a title and transcript abbreviation (EEOB 4240 – “Focused Study of Ecology and Evolution – Plants and People”) similar to that of this course. The Subcommittee can easily imagine this being confusing to students as they search for courses and recommends that the department consider adjusting the course title and transcript abbreviation to be more distinguishable. The Subcommittee apologizes for not realizing this overlap sooner.
   6. The Arts and Sciences Curriculum Committee recently (03-01-2024) updated the list of required syllabus statements for all syllabi to include a new statement on religious accommodations.  The new version of this required statement is a result of a directive by the Executive Vice President and Provost and can be found here on the [ASC Curriculum and Assessment Services website.](https://asccas.osu.edu/submission/development/submission-materials/syllabus-elements) Please note that the link to religious holidays, holy days and observances at the end of the statement is also required to be included in the syllabus The Subcommittee thanks you for adding this revised statement to your course syllabus. [Syllabus p. 9]
   7. Declined to vote.
3. Physics 1248 (new course requesting GEN Foundation Natural Sciences) (return)
   1. **Contingency**: The Arts and Sciences Curriculum Committee recently (03-01-2024) updated the list of required syllabus statements for all syllabi to include a new statement on religious accommodations.  The new version of this required statement is a result of a directive by the Executive Vice President and Provost and can be found here on the [ASC Curriculum and Assessment Services website.](https://asccas.osu.edu/submission/development/submission-materials/syllabus-elements) Please note that the link to religious holidays, holy days and observances at the end of the statement is also required to be included in the syllabus The Subcommittee thanks you for adding this revised statement to your course syllabus. [Syllabus p. 5-6]
   2. *Recommendation*: The Subcommittee wonders if the prerequisite Math 1050 (Precollege Mathematics I) was intended to be Math 1150 (Precalculus) or even Math 1148 (College Algebra). Math 1050 is not at the same level as the other possible prerequisites for the course, Math 1120 & 1121 (Precalculus with Review I & II), and based on the rigor of the course it is unlikely that a student at the level of Math 1050 would be successful. If this was not simply a mistake, the Subcommittee strongly recommends that the department consider adjusting this prerequisite. Along those lines, the Subcommittee recommends that the department include the applicable math placement level as well as “or higher” following the list of the prerequisite courses in the syllabus and on the form in curriculum.osu.edu (e.g., Math 1150, 1120, 1121, or higher OR Math Placement Level L). To clarify, if the department decides to list Math 1150 as a prerequisite, the proper math placement level is L as placement level N only makes a student eligible to *enroll* in Math 1150 and does not place them above it. If the department decides to list Math 1148 as a prerequisite, the proper math placement level is M for the same reason. For more information regarding Math course and placement levels, please see the [Math Course Progression page](https://math.osu.edu/undergrad/non-majors/scheduling/progression-charts) and the [Interpreting Placement Test Results page](https://math.osu.edu/undergrad/new-students/math-placement/results) on the Department of Mathematics website. [Syllabus p. 1 and submission form]
   3. *Recommendation*: Based on the calculations of the Subcommittee, it seems that the credit hour statement on the first page of the syllabus is slightly off—the statement should reflect that students can expect to spend approximately 7 hours per week on out-of-classroom work rather than 6.
   4. *Recommendation*: The Subcommittee recommends that the department include a technology statement in the syllabus, listing the technology and software required of the course.
   5. Ottesen, Cole; unanimously approved with **one contingency** and *three recommendations*.
4. Physics 1249 (new course) (return)
   1. **Contingency**: The Arts and Sciences Curriculum Committee recently (03-01-2024) updated the list of required syllabus statements for all syllabi to include a new statement on religious accommodations.  The new version of this required statement is a result of a directive by the Executive Vice President and Provost and can be found here on the [ASC Curriculum and Assessment Services website.](https://asccas.osu.edu/submission/development/submission-materials/syllabus-elements) Please note that the link to religious holidays, holy days and observances at the end of the statement is also required to be included in the syllabus The Subcommittee thanks you for adding this revised statement to your course syllabus. [Syllabus p. 4]
   2. *Recommendation*: The Subcommittee notes that the prerequisites for the course have not been updated in the syllabus and recommends that the department match the prerequisites in the final syllabus with those listed on the submission form. However, the same situation regarding the prerequisite Math 1050 applies here as with Physics 1248—The Subcommittee wonders if the prerequisite Math 1050 (Precollege Mathematics I) was intended to be Math 1150 (Precalculus) or even Math 1148 (College Algebra). Math 1050 is not at the same level as Math 1120 & 1121 (Precalculus with Review I & II) and based on the rigor of the course, it is unlikely that a student at the level of Math 1050 would be successful. If this was not simply a mistake, the Subcommittee strongly recommends that the department consider adjusting this prerequisite. Along those lines, the Subcommittee recommends that the department include the applicable math placement level as well as “or higher” following the list of the prerequisite courses in the syllabus and on the form in curriculum.osu (e.g., Math 1150, 1120, 1121, or higher OR Math Placement Level L). If the department decides to list 1150 as a prerequisite, the proper math placement level is L, as placement level N only makes a student eligible to *enroll* in Math 1150 and does not place them above it. If the department decides to list Math 1148 as a prerequisite, the proper math placement level is M for the same reason. For more information regarding Math course and placement levels, please see the [Math Course Progression page](https://math.osu.edu/undergrad/non-majors/scheduling/progression-charts) and the [Interpreting Placement Test Results page](https://math.osu.edu/undergrad/new-students/math-placement/results) on the Department of Mathematics website.
   3. *Recommendation*: Based on the calculations of the Subcommittee, it seems that the credit hour statement on the first page of the syllabus is slightly off—the statement should reflect that students can expect to spend approximately 5 hours per week on out-of-classroom work rather than 4.
   4. *Recommendation*: The Subcommittee recommends that the department include a technology statement in the syllabus, listing the technology and software required of the course.
   5. Ottesen, Cole; unanimously approved with **one contingency** and *three recommendations*.
5. Astronomy 2020 (new course requesting GEN Theme Lived Environments)
   1. Comment: The Subcommittee would like to commend the department on what they view as an excellent and very interesting course.
   2. Comment: The Subcommittee notes that there is a statement in the syllabus above the Theme Goals and ELOs that references the GEC, which is an old general education program that the university no longer operates on. The Subcommittee recommends that the department remove this statement altogether as it is not necessary to include in the syllabus. [Syllabus p. 9]
   3. **Contingency**: The Arts and Sciences Curriculum Committee recently (03-01-2024) updated the list of required syllabus statements for all syllabi to include a new statement on religious accommodations.  The new version of this required statement is a result of a directive by the Executive Vice President and Provost and can be found here on the [ASC Curriculum and Assessment Services website.](https://asccas.osu.edu/submission/development/submission-materials/syllabus-elements) Please note that the link to religious holidays, holy days and observances at the end of the statement is also required to be included in the syllabus The Subcommittee thanks you for adding this revised statement to your course syllabus. [Syllabus p. 8]
   4. *Recommendation*: The Subcommittee recommends that the department include a technology statement in the syllabus making it clear that students are required to have a camera of some sort in order to complete certain requirements of the course. Along those lines, the Subcommittee wonders if a cell phone camera without a solar filter will suffice without damaging its sensor and recommends addressing this in the syllabus if necessary.
   5. Ottesen, Lee; unanimously approved with two comments, **one contingency**, and *one recommendation*.
6. OSU-Mansfield Biology major proposal
   1. Comment: The Subcommittee appreciates the work that has been put into this proposal and is very much in support of the Mansfield campus offering these specializations in their entirety.
   2. Ottesen, Cole; unanimously approved with one comment.