

ASCC Natural and Mathematical Sciences Subcommittee

Approved Minutes

Wednesday, March 26th, 2025

12:30PM – 2:00PM

CarmenZoom

Attendees: Barker, Carlson, Dinan, Hadad, Hilty, Mick, Lee, Vankeerbergen

1) Approval of 03/05/2025

- Lee, Barker, **unanimously approved**

2) Astronomy 1100 (new course requesting 100% DL and GEN Foundation: Natural Sciences) (Return)

- The Subcommittee noted and appreciated the substantial changes made to the software requirements of the course and thanks the proposer for including these changes to the course syllabus.
- The Subcommittee would like to see more diversity in how the instructional team will interact with students throughout the course. While they appreciate the implementation of the Astro Chat sessions, they were unconvinced that, in the current form, there is enough instructor interaction/presence within the course and would like to see additional evidence of the required Regular and Substantive Interaction (RSI). As a recommendation, the Subcommittee would like to provide some guidance from the ASC Office of Distance Education as to how the course proposer may increase instructor presence within the course, which can be found on [their website here](#).
- The Subcommittee noted that a significant portion of the course assignments (as found on pages 12-13 of the syllabus) appear to be automatically graded within CarmenCanvas and offer few opportunities for substantive feedback and interaction from the course instructor. The Subcommittee would like to see some of the course assignments either be redesigned or reimagined to allow for more opportunities for students to interact and engage with the material and the instructional team, as they believe this will help the course to better fulfill the requirements of the GEN Natural Sciences ELOs. Additionally, as a guide to assist the proposer in redesigning the course assignments, the Subcommittee recommends that at

least 25% of all course assignments allow for substantive interaction and feedback from the instructional team.

- The Subcommittee notes, on page 5 of the syllabus, that the course states it will operate “96% online”. They believe what it is meant is that this course will operate 96% asynchronously online and 4% synchronously. They ask that this be updated as there are no in-person components of the course.

- **Declined to Vote**

3) Biology 4210 (new course requesting GEN Theme: Lived Environments with High-Impact Practice: Research & Creative Inquiry)

- The Subcommittee noted (as stated on page 1 of the syllabus) that the course is set to only meet twice weekly for 80 minutes each class session. This is not enough contact hours to meet the standards of a 4-credit hour course. As a reminder, for every credit hour, there should be one hour of direct instruction and two hours of out-of-classroom experiences (or, if calculated at the laboratory rate, 2 hours of direct instruction and one hour of out-of-classroom experiences) in order for a student to earn a letter grade of “C”. This means that for a 4-credit course meeting twice a week, class meetings will need to be 110 minutes each session (if calculated at the traditional “lecture” style). Additionally, underneath the “Credit Hours and Work Expectation” section on page 1 of the syllabus, this statement should be corrected to read that there will be 4 hours a week of direct instruction and 8 hours a week of out-of-classroom experiences.
- The Subcommittee would like to see a small sampling of the articles and primary literature that will be read within the course to allow them to have a better understanding of both student workload and how the literature will interact with course assignments.
- The Subcommittee noted that a goal of the course was to produce a publishable work (as noted on page 4 of the syllabus). They would like to see additional information in the syllabus surrounding the logistics of publishing the work students complete during the session. How will authorship be dispersed? What obligations will students have outside of the course once the work is published? How will students be able to manage control of how they want to be included on the publication? Recognizing that the work will likely not be published prior to the end of the semester, how will the instructor continue to work with students once the semester ends and the work moves through the publication process?

- The Subcommittee asks that the unit seek concurrence with the College of Education and Human Ecology. The contact for the College of Education and Human Ecology is Associate Dean Anastasia Synder.893.
- The Subcommittee noted that the prerequisite for this course is Biology 3501.xx. Biology 3501.xx is a course that will predominantly only be taken by students within the Biology major and minor. As a reminder, General Education courses must be broadly available to students from a diverse and large background and should not be geared towards any particular population of student. While the issue of determining whether a course is a valid GE course is the purview of the Themes Subcommittee, the Natural and Mathematical Sciences Subcommittee would like to make the recommendation to change the prerequisite to be far more inclusive of non-Biology students.

- **Declined to Vote**

4) BA Liberal Arts Discussion (B. Vankeerbergen)

- Vankeerbergen: The College of Arts and Sciences is working on developing a BA program in Liberal Arts to attract students that have left the university without a degree and now wish to earn a degree. The College would like the feedback of the faculty working within curriculum development and, therefore, is bringing this draft proposal to the Natural and Mathematical Sciences Subcommittee for your review.
- The Natural and Mathematical Sciences Subcommittee had the following feedback on the BA Liberal Arts proposal:
 - The Subcommittee emphasizes that the proposal should stress the value that this degree brings as a degree from The Ohio State University. It is important to emphasize why students will want to choose a degree from Ohio State rather than one of the many other similar degree programs within the state of Ohio and beyond.
 - The Subcommittee recommends removing the specified number of disciplines students will be required to “acquir[e] advance understanding” of in Program Goal 2. Currently, the draft proposal indicates that students are required to take coursework in three disciplines; however, the subcommittee members believe removing this quantification will allow for maximum flexibility.
 - The Subcommittee believes that program Goal 3 may be too vague as currently written. As an example, ELO 3.a, which states students “will analyze problems from multiple perspectives”, is unclear.

There is no evidence in the Goal or the ELO which identifies what these “problems” could be.

- The Subcommittee recommends a potential name change to the degree program. First, a BA in Liberal Arts, to the general population, would not necessarily lead students that wish to study the Natural and Mathematical Sciences to the program, and they believe this may hurt recruitment efforts. Second, it is not uncommon for the general public to misunderstand the term “liberal arts” and, therefore, make it difficult to market the program.
- The Subcommittee recommends adding a component to the proposal which emphasizes the resources offered to students enrolling within the program in central Ohio. While it is clear that the program is meant to be primarily online, they believe it would be beneficial to highlight the resources available to students should they choose (and are able) to take in-person coursework and/or utilize on-campus resources.