**ASCC Natural and Mathematical Sciences Panel**

Approved Minutes

Thursday, September 22, 2022 9:00 AM – 10:30 AM

CarmenZoom

**Attendees**: Barker, Cody, Cole, Dinan, Hamilton, Hilty, Kaizar, Ottesen, Vankeerbergen

**Agenda:**

1. Approval of 9-8-22 minutes
   * Kaizar, Hamilton; **unanimously approved**
2. Entomology 1350 (existing course with GEL Natural Science—Biological Science) and 1351 (new lab; taken together the courses will fulfill the 4 credit GEN Foundation Natural Science requirement) (tabled from last time)
   * The Panel thanks the department for submitting the course proposal for Entomology 1350 & 1351 for consideration as a GEN Foundation Natural Science requirement. The reviewing faculty are excited about this course and eager to see it formally approved and adopted as a part of the new GE curriculum. However, the Panel believes that the course in its present form requires further revision before members can fully assess its readiness to be categorized as a GEN Foundation Natural Science requirement. In particular, the Panel would like to see the experiential component of the course (1351) engage more dynamically and robustly with the principles and methodologies at the core of disciplines in the natural sciences. At present the course — while intriguing and intellectually provocative — appears to employ elements of social and behavioral sciences much more heavily than the natural sciences. To remedy this, the reviewing faculty ask that:
     + The course incorporate additional experimental design aspects, especially including an increased emphasis on the process(es) of generating and analyzing data.
     + The department consider as a design aspect how 1350 and 1351 will be experienced together by the majority of students who are expected to take these courses in parallel — can these parts enhance each other as a complete education experience, even though some students might choose to enroll in the parts separately?
     + The online discussion forum not serve as the primary means by which students interact and experience the course together — while valuable, it cannot readily replace the kind of interactions students have working in a lab together collecting data for an experiment.
   * **No Vote**
3. Pub Hlth: Biostatistics 2210 (existing course requesting GEN Foundation Mathematical and Quantitative Reasoning (or Data Analysis) (tabled from last time)
   * *The Panel recommends adding more explicitly to the syllabus a discussion of bioethics — also taking care to emphasize where and how the course will wrestle with the social and ethical implications of working with public health data.*
   * *The syllabus states that the discussion board assignment is a mandatory weekly requirement — but how will this be enforced, and where does this bit of coursework feature in the grade breakdown? The Panel recommends clarifying this information accordingly.*
   * Hamilton, Kaizar; **unanimously approved** with *two (2) recommendations* (in italics above)
4. Microbiology 7719 (existing course requesting change in credit hours from 2 to 3)
   * The Panel asks that the course change rationale — an increase from 2 to 3 credit hours — be more explicitly reflected in the syllabus document. The reviewing faculty found it difficult to discern the way contact hours and workload are transitioning from 2 to 3 hours in the course proposal’s current form. In particular:
     + The Panel requests further signposting regarding changes to the course so the newer features that justify the increase from 2 to 3 credits hours are more readily apparent.
     + What is the weekly format for the class? 1 3-hour meeting? 2 1.5 hour meetings? The Panel asks for additional clarification here.
     + The reading lists seem nearly identical in the old vs. new version of the syllabus. What readings have been added to the class to correspond with the credit hour increase?
     + How will the grading percentages be restructured to address the ways the course components have been reshuffled in the 3-credit-hour version of the course?
     + It appears that 1 quiz of an hour in length will account for 25% of students’ final grade in the course. Is this the case? This seems like a great deal of weight to put on a single, short assignment.
     + What assignments have moved from optional to mandatory in the 3-credit-hour version of the course? Please underscore this more readily and clearly in the proposal for the reviewing faculty.
   * **No Vote**
5. New undergraduate certificate in Climate Change Fundamentals (submitted by Geography and Earth Science)
   * The Panel concurs with the feedback provided by the ASCC Social and Behavioral Sciences Panel on 9-15-22.
   * *In lieu of student poster presentations serving as the primary means of collecting student feedback on the program, the Panel suggests putting together an alternative forum so that comments about the certificate do not have to circulate in such a hyper-public arena.*
   * *The Panel recommends that the proposal materials explicitly state whether or not the alternative “capstone event” has to be a credit-bearing experience. If the capstone event does not have to be credit-bearing, how will the students make up/account for the remaining 3 credit hours of coursework out of the total 12 required for this certificate?*
   * *The Panel kindly recommends thinking ahead to the ongoing composition, continuity, and governance structure that this undergraduate certificate will require. For instance, there is mention of a steering committee in the proposal materials, but there is no indication re: how any future members might be appointed or cycled on/off the committee in the future. How will the departments ensure that there are ready and able people actively serving on the committee?*
   * Hamilton, Barker; **unanimously approved** with *three (3) recommendations* (in italics above)
6. Mathematics 2175 (new course)
   * *The Panel recommends that the department communicate to any stakeholder units potentially affected by the advent of this new bridge class how this might change/realign the various sequences of courses students pursue to complete their degree requirements.*
   * *The Panel recommends that the ways assigned readings (if any) fit into the course structure be more readily apparent in the syllabus document. If students are expected to read as part of homework — even if this reading is embedded within an interactive electronic textbook — the Panel suggests indicating this more explicitly re: what students can expect as part of their workload for the class.*
   * *On page 2 of the syllabus, the Panel kindly notes that “midterm” and “review” appear to be in the incorrect/inverse columns on weeks 6 and 10 of the course schedule, and suggests revising this accordingly.*
   * *The Panel recommends removing any reference to an “OSU standard grading scheme,” as Ohio State does not have a standardized grading scheme.*
   * *The Panel suggests that the department include the most up-to-date version of the University’s Title IX statement, which can be found here:* [*https://asccas.osu.edu/curriculum/syllabus-elements*](https://asccas.osu.edu/curriculum/syllabus-elements)
   * Hamilton, Kaizar; **unanimously approved** with *five (5) recommendations* (in italics above)
7. Earth Sciences 6650 (new course)
   * **The Panel requests that the syllabus clarify the specific financial costs students might expect as part of attending the field trips. For instance, will students be paying the costs of transportation and lodging (especially for the overnight trips), or is there an alternative source of funding going toward these resources?**
   * **The Panel asks that the syllabus specify any clothing or equipment students might be expected to have for the field trips. These items should appear in the section of the syllabus that details required supplies and resources for the course, and also include information about how/where students might obtain these supplies (if applicable).**
   * **The Panel requests that the syllabus outline any safety requirements, procedures, or provisions students with special medical requirements and/or SLDS accommodations might need to access in order to participate in the field trips.**
   * *Regarding the above feedback point, the Panel recommends that the department consider also featuring the field-trip-specific SLDS accommodation information in a more prominent, easy-to-find part of the syllabus — so that such an important resource specific to this course is not inadvertently overlooked within the standard SLDS statement (on page 2 of the syllabus).*

* *Furthermore, the Panel recommends that the syllabus feature the most current Student Life Disability Services (SLDS) statement, available here:* [*https://asccas.osu.edu/curriculum/syllabus-elements*](https://asccas.osu.edu/curriculum/syllabus-elements)
  + *The Panel recommends adding further detail to the grading breakdown (found on page 1 of the syllabus) so students have a clearer understanding re: how they are being evaluated in the course. For instance, are these three percentage categories further subdivided in any way? How are these categories — like participation, for example — specifically monitored or assessed?*
  + Hamilton, Barker; **unanimously approved** with **three (3) contingencies** (in bold above) and *three (3) recommendations* (in italics above)