

From: [Steele, Rachel](#)
To: [Humanic, Thomas](#); [Thaler, Lindsey](#)
Cc: [Steele, Rachel](#); [Panero, Wendy](#); [Vankeerbergen, Bernadette](#); [Cody, Emily](#); [Hilty, Michael](#)
Subject: Physics 1270 and 1271
Date: Monday, April 4, 2022 7:45:27 PM
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Good evening,

On Monday March 28th, the Natural and Mathematical Sciences Panel of the ASC Curriculum Committee reviewed a new course proposal for Physics 1270 and 1271. Please find below the Panel's feedback for these courses.

- Physics 1270 (new course) – The Panel did not vote on the proposal, as they would like the following points addressed:
 - The Panel is enthusiastic about the development of this course, the pedagogical principles behind such an offering, and the potential impact on traditionally underserved/underrepresented populations in the natural sciences.
 - The Panel strongly encourages the department to focus their curricular work on Physics 1270 rather than 1271 because of the offering schedule (1270 being an autumn offering and 1271 being a spring offering.) While the concerns outlined below are substantive, the Panel hopes that the department will be able to resolve them quickly. They look forward to working with the department to get these courses approved.
 - The Panel understand the department's urgency and desire to have this course ready for NFYS Orientation in SU22. However, since the course will eventually be put forth for a GE, they feel that some questions surrounding the course's eventual GE status need to be addressed before they can consider the class for approval.
 - The Panel asks the department to consider whether there is enough time spent engaged directly in laboratory activities for this to be considered a GE Foundations: Natural Science course. Traditionally, 1 credit hour's worth of instruction is devoted to laboratory activities; in the case of Physics 1270, this would be 20% of the course time. The syllabus (pg. 7 under "Descriptions of Major Course Assignments; Testing yourself",) states that quizzes will be given during lab meetings every two weeks. Additionally, the course calendar mentions two exams that will be given during the laboratory meeting (Week 6 and Week 11). The Panel asks the department to clarify whether this will significantly impact the amount of time that students are engaged in experiential learning during these meetings.
 - Additionally, the Panel notes that only 10% of the final grade comes from the laboratory component of the class (syllabus pg. 6 under "Grading and Faculty Response; How Your Grade is Calculated"). Assuming that a minimum of 1 CH (20%) of the course is devoted to laboratory activities, the Panel would expect that at least 20% of a student's grade would be related to laboratory activities, and they request that the department provide clarification on this matter.
 - The Panel also asks the department to clarify how much of the WebAssign Homework (syllabus pg. 7 under "Descriptions of Major Course Assignments; Practicing) engages with laboratory work, as this could have some bearing on the overall amount of work/class time spent on laboratory activities.
 - The Panel asks that the course calendar (syllabus pg. 13-14 under "Course Schedule") be amended to include due dates for all assignments and further information about the

readings that includes the name of the text, page numbers and/or chapter numbers. The Panel is unclear about the current notational system being used (i.e., “C1” or “N4”).

- The Panel asks that the length of the recitation meeting (presumably 55 minutes) be specified on the syllabus (Pg. 1 under “Course Information; Course times”).
 - The Panel requests that the statement about credit hours (Syllabus pg. 3 under “How This Course Works; Credit hours and work expectations”,) be amended to reflect the alternate method of accounting for credit hours in a laboratory course. Information surrounding these rules can be found in the ASC Curriculum Manual (Pgs. 18-19, Section VI.B.3) which is available online here:
https://ascas.osu.edu/sites/default/files/2021-09/2021-22_asc_curriculum_and_assessment_operations_manual.pdf
 - The syllabus (pg. 13 under “Course Schedule; Week 6 and 11”,) mentions Unit Exams. The Panel asks that the department clarify whether these are the same as or different from the “Topical Quizzes” mentioned elsewhere in the syllabus (pg. 6 & 7) or an artifact of previous versions of the course.
 - The Panel notes that students are asked to see Dr. Bolland with questions regarding WebAssign Homework (syllabus pg. 7 under “Descriptions of Major Class Assignments; Practicing”) but the syllabus does not explain to students who Dr. Bolland is. The Panel asks that Dr. Bolland’s contact information and function within the department be explained along with the instructor and TA information near the beginning of the syllabus.
 - The Panel asks that the department clarify whether an iPad (or other tablet) is necessary for the course (syllabus pg. 4 under “Required Equipment”). Would a traditional laptop serve students equally well? Is a touch screen or the ability to draw with an Apple Pencil or similar stylus necessary?
 - The Panel asks that the Course Prerequisites (syllabus pg. 2) be amended to include Math 1141 and exclude all three-digit (quarter) course numbers.
 - The Panel asks that the department add language to the 1250 syllabus that clearly denotes it as a GE course. All courses offered under the new GE Foundations: Natural Science should state all of the goals and ELO’s of the category. This information can be found at <https://oaa.osu.edu/ohio-state-ge-program>.
 - The Panel reminds the department that pre-requisites for all subsequent courses in the major will need to be adjusted to include 1270/1271 so that students do not encounter difficulty when scheduling via BuckeyeLink.
 - The Panel reminds the department to reach out to other offices and departments/schools/college across the University that may need to adjust their own pre-requisites and/or guidance to students to account for this new version of the introductory physics sequence. These departments likely include, but are not limited to, the Department of Chemistry and Biochemistry, the Center for Life Sciences Education, the School of Earth Sciences, the College of Engineering, ASC Advising, Engineering Advising, University Exploration Advising and Ohio State’s Central Advising Office.
 - The Panel asks that the department clarify whether students can take Physics 1251 after taking 1270 (as students might wish to do if they change majors after the first semester.) While the provided Physics 1271 syllabus states that students can take 1271 after having taken 1250, the Panel would like clarification on whether the reverse is true.
- Physics 1271 (new course) – The Panel did not vote on the proposal, as they would like the following points addressed:
 - The Panel recognizes that Physics 1271 presents many of the same issues and concerns as Physics 1270. The Panel respectfully defers the evaluation of this course until the

concerns with Physics 1270 have been resolved and that course has been approved for the GE Foundations: Natural Sciences. The Panel encourages the department to focus their efforts on Physics 1270 at this time.

I will return Physics 1270 and 1271 to the department queue via curriculum.osu.edu in order to address the Panel's requests.

Should you have any questions about the feedback of the Panel, please feel free to contact Wendy Panero (faculty Chair of the NMS Panel; cc'd on this e-mail), or me.

Best,
Rachel



Rachel Steele, MA

(Pronouns: she/her/hers / Honorific: Ms.)

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