

## Physics 140: Advisor FAQ

*Helping students decide between the lecture and studio style versions of Physics 140 (FA 2019)*

**Q: As an LSA student, which format makes the most sense for me?**

A: The best fit for you depends on your anticipated comfort level in a large course setting. If you feel comfortable learning physics in a lecture setting where more independent, out of class work is required, the lecture format may be a good fit. If it seems like working through practice problems in class with your peers would be more helpful, the studio style seems like a good fit.

**Q: I'm nervous about the large lecture format of courses at Michigan. Would the studio style be a good option?**

A: Yes! The studio style format is designed to provide students with an experience of a small class (24 students) in the context of a large course.

**Q: I prefer to learn by working through problems on my own. Which is the best option?**

A: The lecture format may be the best fit for you. Most of class time during the studio style format is spent working in small groups of 3.

**Q: I want to find resources to help me succeed in the course, get to know my professor, find people to study with, and make friends. Does Physics 140 offer any resources for me?**

A: Students in section 003 of the studio style course have the option to participate in a friendly, supportive learning community called **STEM Comm**. Students in the STEM Comm community will join each other in the same "neighborhood" of the Physics 140 studio course, a weekly study group, and a 1-credit weekly seminar led by your professor and a success coach. By spending time together in these contexts, students get to know each other well and help each other learn. The seminar will help you develop success skills for college, explore cutting edge topics in science, and explore your career and life goals (no exams or lengthy reading). For more information, ask your advisor to register, email the success coach ([bauermb@umich.edu](mailto:bauermb@umich.edu)), or visit the website: <https://sites.google.com/umich.edu/stem-comm/>.

**Q: I want to get to know my peers through my classes. Which is the best fit?**

A: The studio style may be a good fit for you. You'll work with the same neighborhood of 24 students for the whole semester, and within that neighborhood, you'll rotate through groups of three. There will be plenty of opportunities to get to know your fellow students and the learning assistant, more-so than in the lecture format. If you join the STEM Comm community, you will have additional opportunities to make meaningful connections with other students through participation in the community study group and seminar.

**Q: Will I be doing the same thing during the lecture and studio style class sessions?**

A: No. Most of in-class time (75%) in the studio style course will be spent actively solving problems in a small-group setting. In the studio style, the questions you'll be working through will be more in depth and closer to what you see on exams compared to the iClicker questions in the lecture format. There is not group work in the lecture format; students participate through answering 6-10 iClicker questions per lecture.

**Q: Who teaches each course?**

A: The student:instructional team ratio is 240:3 in the lecture format, and 120:7 in the studio style format. In the lecture format, for 240 students there will be 1 faculty member and 2 LAs; the 2 LAs circulate during lecture to help with iClicker questions. In the studio style, for 120 students there will be 1 faculty member, 1 GSI, and 5 undergraduate learning assistants (LAs); each neighborhood of 24 students will work with the same LA over the course of the semester.

**Q: Will the content be different?**

A: No, both formats cover the same content. As described above, the format of the course and in-class activities are different.

**Q: Do I have to take Physics 141 at the same time (co-enroll) Physics 140?**

A: It is strongly encouraged to take 141 at the same time as 140, regardless of whether you are enrolled in a lecture or studio style section of 140. Grades for 141 will not be connected to grades for 140.

**Q: Will the percentage of my grade determined by exams differ across the two formats?**

A: In the lecture format, *greater than 50% of your final grade* will be determined by your grades on exams. In the studio style format, *20% of your final grade* will be determined by your grades on exams.

# PHYSICS 140

*Now offered in two different formats*

Physics 140 is a large introductory physics course for physical scientists and engineers. This course typically enrolls 650-700 students per term. In Fall 2019, Physics 140 will be offered in two different formats. Review this information to decide which format is the best fit for you!



## Large Lecture Sections



Sections 001 and 002 will meet **four times a week in one hour sessions**, with an enrollment capacity of 240 students each. This class is taught in a large lecture hall with a single faculty member or lecturer instructing the students. Each section is made as active as possible in this environment, with students responding to 6-10 questions per hour using iClickers. These sections also employ two undergraduate learning assistants who are available to help students consider their answers to the iclicker questions asked by the instructor.

## Active-Learning Studio Sections



Sections 003 and 004 will meet **twice a week in two hour sessions**, with an enrollment capacity of 120 students each. Each section will be led by a physics faculty member and a GSI. Students will spend the semester working together in 'neighborhoods' of 24. One undergraduate learning assistant (LA) will work with each neighborhood for the entire semester, answering questions about content and providing social support. A former student describes the studio format as "a very non stressful environment which makes it easier to focus on learning the material."

	LECTURE	STUDIO STYLE
Class Interaction	6-10 iClicker questions per lecture	Group work during 75% of class
Student Groups	Nothing formal	Rotating sub-groups of 3 within neighborhoods of 24
Classroom	Traditional Lecture Hall	Studio Classroom (BSB 1060)
% of Grade from Exams	>50%	20%
Student: Instructional Team Ratio	240:3	120:7