



Physics 099 Fast Facts

1) PHY 099 is a Fall class **required** for students who will take PHY 121/121P the next spring, and for students interested in taking PHY 122/122P subsequently, who are **not majoring in Engineering**. One **must register** for and **complete** PHY 099, or one of the Hajim School of Engineering equivalents listed below, in order to take PHY 121/121P or PHY 122/122P.

2) The following courses, if taken in Fall 2015 or later, can be used to fulfil this requirement in lieu of PHY 099:

- BME 101/EAS 101 — Intro to BME
- CHE 150/EAS 102 — Green Energy
- AME 140/EAS 103/ECE 140/MUR 141 — Intro to AME
- ME 104/EAS 104 — The Engineering of Bridges
- OPT 101/EAS 105 — Intro to Optics

3) PHY 099 is a mastery-learning class in basic (pre-calculus) mathematics as used in physical science and engineering. It is a zero-credit-hour, Credit/No Credit class with three components:

- The **Basic Math Assessment (BMA)**, a paper and pencil exam administered in class;
- **Mastery-learning** educational modules using the WeBWork system, for students to use in preparation for the BMA;
- **Workshops**, an interactive classroom environment for learning, practice and review.

3) The first meeting of PHY 099 will be a course overview at 8:00 AM, Wednesday, August 30, 2017, in B&L 106. The first opportunity to take the BMA will be the following week: 8:00 AM, Wednesday, September 6, 2017, in B&L 106. Students who complete this exam with a passing grade – at least 16 points out of 24 – will have successfully completed the course, and be issued Credit in PHY 099.

4) Four different practice tests from a previous year are available at www.pas.rochester.edu/~mcelmurry/phy099/, the PHY 099 website.

5) Students who do not pass the BMA the first time must complete the WeBWork practice/mastery modules before making another BMA attempt. In support of this practice and mastery, workshops will be held every Tuesday and Wednesday, starting on September 6, 2016. Students who have not yet passed the BMA should attend workshop regularly.

6) The BMA will be administered three more times during the semester, on October 4, November 8, and December 13. Complete the WeBWork modules and pass the BMA one of these times, to get credit for PHY 099.

7) Non-engineering majors who have AP credit for PHY 121, and who intend eventually to take PHY 122/122P, should meet with the Physics and Astronomy advisers at Academic Open House, to determine when they should take PHY 099 and the BMA.

8) Students who qualify for PHY 141 or 142 placement do not need to take PHY 099.

For more information:

<http://www.pas.rochester.edu/~mcelmurry/phy099/>