Calculus at Holy Cross Fall 2019

Advisory Information

Do you need calculus? If so, how much?

- We recommend taking calculus at Holy Cross only if you are planning to pursue health professions or a major or minor that requires calculus (see below). If you are only interested in fulfilling a common area requirement, we recommend taking a math course other than calculus, such as Topics in Math (MATH 110) or Statistical Reasoning (STAT 120).
- Mathematics, economics, physics, and chemistry majors, or statistics minors, must complete both Calculus 1 and Calculus 2.
- Accounting, biology, and computer science majors only need to complete Calculus 1.
- Student interested in health professions must complete Calculus 1 and a course in statistics. Students majoring in biology, economics, accounting, psychology, sociology, or anthropology should take the statistics course offered by their department. For health professions students in other majors, STAT 220 is the appropriate statistics course. Therefore we recommend waiting until you have decided on a major to take statistics.

Which course should I take?

The expected background knowledge for success in Calculus 1 is a solid understanding of algebra and pre-calculus. Success in Calculus 2 requires an understanding of material from Calculus 1 (limits, derivatives and their applications).

- If you struggled in pre-calculus in high school (or did not take it) and have never taken calculus before, you should consider taking Calculus 1 with Fundamentals (MATH 133). This course is designed for students who need more support as they transition to college-level mathematics. It covers the same material as MATH 135, but meets 5 hours per week instead of 3 hours per week. Contact the department chair, Professor Gareth Roberts (groberts@holycross.edu), for permission. There are currently a few openings in MATH 133.
- If you did well in pre-calculus in high school, or took calculus in high school but don't feel ready to go straight into Calculus 2, then you should take Calculus 1 (MATH 135).
- If you took calculus in high school, did well in it, and feel confident about your understanding of limits, derivatives, and their interpretations and applications, then you can skip Calculus 1 and enroll in Calculus 2 (MATH 136). No permission is needed to start in Calculus 2.
- If you earned a 4 or 5 on an AP Calculus exam, you have credit for Calculus 1 and/or Calculus 2:
 - o If you earned a score of 4 or 5 on the AP Calculus AB exam (or a 4 or 5 on the AB portion of the BC exam), you have earned credit for Calculus 1 and you can start in Calculus 2 if you need both courses. We strongly recommend starting in Calculus 2 if you have AP credit to do so; otherwise you forfeit your AP credit.

 If you earned a score of 4 or 5 on the AP Calculus BC exam, you have earned credit for Calculus 2. If you are interested in continuing in mathematics, we recommend taking either Multivariable Calculus (MATH 241) or Algebraic Structures (MATH 243). We recommend MATH 243 for students considering a major in mathematics.

Enrollment

- Starting on August 19, when open enrollment begins, you will be able to switch calculus sections or move from Calc 1 to Calc 2 (or vice versa) on STAR. We may be adding seats to some sections during the enrollment period, so if you are not able to get into your desired section right away, keep checking for availability on STAR. You may contact the department chair, Professor Gareth Roberts (groberts@holycross.edu), for assistance.
- Add/Drop period ends on September 10. We will however, provided seats are available, allow you to switch from Calculus 2 to Calculus 1, or vice versa, until September 17, if you find that you are struggling in Calculus 2 or that you want to skip Calculus 1.

Textbook and Online Homework Information

- All sections of MATH 133, MATH 134, MATH 135 and MATH 136 will be using *Calculus:* Single Variable (Early Transcendentals), Third Edition, by Jon Rogawski and Colin Adams.
- We will be using WebAssign for online homework assignments. Your instructor may also assign additional written homework to be handed in separately.
- The Holy Cross bookstore will sell the textbook (as a hole-punched loose leaf) bundled with a WebAssign access code for \$119.75 (the used version sells for \$90.00). The access code includes both homework and eBook access for the life of the edition.
- At the beginning of the semester, your calculus instructor will give you a **Class Key** that will allow you to enroll on WebAssign. You will then be asked to enter your WebAssign access code, or you can purchase one online from WebAssign directly if you don't already have one. Note: Typically, access to WebAssign is free for the first two weeks of the semester.
- If you have already purchased a copy of the textbook elsewhere and need WebAssign access, or don't want a hard copy of the textbook and just want the eBook with WebAssign access, here are some additional purchasing options:
 - Single-term access to WebAssign homework only (no eBook): \$52.99
 Select this if you already have a hard copy of the text and need homework access for only one semester.
 - Single-term access to homework and eBook: \$89.99
 Select this if you want only the eBook (no hard copy of the text) and need homework access for only one semester.
 - Lifetime of Edition access to homework: \$99.99
 Select this if you already have a hard copy of the text and need homework access for two semesters.
 - Lifetime of Edition access to homework and eBook: \$130.99
 Select this if you want only the eBook (no hard copy of the text) and need homework access for two semesters.