

# Precalculus

## Math 120 B - Spring 2019

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**Lectures:** MWTh 6:30-7:50 PM, DEN 113. On the website there is a tentative schedule of what chapters a lecture will cover. You should read the chapter in question before lecture and come with any questions prepared. Office Hours will be posted on the course website (above). If you would like to meet with me at any other time, please send me an email and we can arrange a time.

**Purpose:** This course is designed to prepare you for learning calculus. This course will help you develop the skills and stamina necessary to solve lengthy, multi-step problems, involving a variety of pre-calculus mathematical concepts. We will also work on developing algebraic sophistication, and confidence. There will be a lot of practice with many mathematical methods.

We'll cover a large amount of material. You have likely seen much of the content before, but many topics will be new. The course is meant to train you to deal with long and difficult problems, so even when the concepts are familiar, the problems may still be challenging.

**Textbook:** The required text is the *Precalculus*, 2016 edition, (the 11-12 edition is ok) by D.H. Collingwood, K.D. Prince, and M.M. Conroy. Printed copies are available at Professional Copy & Print, and also at EZ Copy N Print, both of which are on the ave. The textbook is **not available at the UW bookstore**. The printed copy is not required. It is freely available online (linked from the class website), and is electronically linked through WebAssign.

**WebAssign:** All homework for this course is done online using the online grading service WebAssign. You will need to purchase an access code for WebAssign. To do this, follow the instructions given on the course website.

### Grades:

- Homework: 15%
- Quizzes: 10%
- Midterms (2):
  - (lower grade): 20%
  - (higher grade): 25%
- Final: 30%

Grades are curved, so that your course grade will reflect your performance relative to the rest of the class rather than a fixed percentage scheme. Historically, the median grade in Math 120 is in the range of 2.5-3.0. If you get at least 95% overall, you will receive a 4.0. If you get at least 70% overall, you will receive at least a 2.0.

**A grade of 2.5 or better in Math 120 is required to move on to Math 124. You will *probably* need to average about 70% or better on exams and quizzes to achieve this.**

**Homework:** Homework will be accessed, turned in, and graded online using WebAssign. Homework is the most important part of any course in mathematics, and this is no exception. Homework will be due on Tuesdays and Fridays at 11:59 PM. As a rule of thumb, the assignment due on Friday will relate to Monday's lecture, and the homework due on Tuesday will relate to those of Wednesday and Thursday of the previous week. Homework will be visible 2 weeks before the due date.

**Late homework will not be allowed.** However, I will 'drop' 10% of homework points, so you can miss 10% of the points without penalty. This should take care of illness, accident, travel, and small WebAssign technical glitches.

It is very important to write up clear solutions for your homework. These will be required in tests and quizzes, and homework is the perfect place to practice showing all your work.

**Exams:**

- Midterm 1: Thursday April 25th (approximately chapters 1-7)
- Midterm 2: Thursday May 16th (approximately chapters 1-14)
- Final Exam: Wednesday June 12th, 6:30-8:20 (cumulative)

**Notesheet for exams:** A single **handwritten**  $8.5 \times 11$  or smaller sheet of notes is allowed during exams. You may write on both sides. You may not print or photocopy any part of a notesheet.

**Calculators for exams:** Graphing calculators are **not** allowed on exams or quizzes. The required calculator for this course is the Texas Instruments **TI-30X IIS**, which may be purchased from many places for under \$20. The UW bookstore carries the orange ones, which they will buy back at the end of quarters, but any color is acceptable.

**Quizzes:** There will be 6 quizzes during the quarter, each one 10-20 minutes long. They will take place every Wednesday, except on the first and last weeks of instruction, or exam days. Each will be graded out of 10 points. The lowest quiz will be dropped. The focus of this class is solving longer multi-step problems, and the quizzes will reflect this. Each quiz will be one long word problem. This will give you an opportunity to work through a long example in a test-like environment, and to receive feedback.

**Quiz or Exam absence:** If you miss a midterm or quiz due to some unavoidable, sudden event (such as a sudden illness, a family emergency, a traffic accident, etc..) you should contact me as soon as possible. If you cannot take a midterm due to a legitimate pre-existing conflict (for example, a religious observance) you must contact me well in advance to make alternative arrangements. You must petition in advance to take a make-up final. Petition forms are available in the Math Advising Office, Padelford Hall C-36. If you miss the final without advance notice due to a sudden event you cannot make it up. You will not be allowed to take the final early.

**A note about the evening section:** The evening section does not have quiz sections. Instead, the lecture is 80 minutes long rather than the 50 which is standard for Math 120. I do not want to be lecturing for 80 minutes each day. Instead, I will lecture for 50 minutes, we will have a break, and then we will finish the class with a couple of work problems related to the day's lecture. This part of the class will be very valuable, as you will have the opportunity to work through a problem and get instant feedback from me or others in your class. Sometimes these will be homework problems I see as possibly difficult.

**Disability Services Office:** The University of Washington is committed to providing access, equal opportunity, and reasonable accommodation in its services, programs, activities, education, and employment for individuals with disabilities. To request disability accommodation contact the Disability Services Office at least ten days in advance at: 206-543-6450/V, 206-543-6452/TTY, or dso@u.washington.edu.