

MATH 120 (Section 05) Analytic Geometry and Calculus - Fall 2022

Meeting time and location: MTWF 11-11:50 am Holt 173

Instructor Information

Instructor: Jing(Jane) Guo

Department: Dept. of Math and Statistics, CSU, Chico

Office location: Holt 150

Telephone: 898-6562

E-mail: jguo2@csuchico.edu (best way to reach me outside of office hours and class sessions)

Office hours: Holt 150 MTWF 12:00pm - 12:50pm (when class is in session)

Prerequisites: Placement by Department Exam; or MATH 119; or MATH 116 and and MATH 118

Course Description and Goals

MATH 120 is a study of:

- Limits and continuity
- Derivatives and their applications
- Transcendental functions
- Definite integrals and area

Objectives/Student Learning Outcomes

Upon successful completion of this course, students will be able to:

1. Demonstrate basic skills and conceptual understanding of differential, integral, and multivariable calculus.
2. Demonstrate basic skills and conceptual understanding as relating to fundamental mathematical objects introduced in our degree core, such as, sets, functions, equations, vectors, and matrices.
3. Interpret and translate problems into appropriate mathematical language; then solve problems by applying appropriate strategies and interpreting the results.
4. Demonstrate the ability to effectively and accurately speak on mathematical topics relevant to their

mathematics option and appropriate to their audience.

5. Students use technology to manipulate mathematical objects (e.g., functions equations, data sets, etc.), to conduct mathematical explorations, to model problem scenarios, and to analyze mathematical objects.

6. Students demonstrate the ability to apply mathematics and statistics to new contexts (e.g., in other classes, the workplace, graduate school, or classes they teach).

Texts / Materials

Required Textbook Hartman, Gregory, Brian Heinhold, Troy Siemens, and Dimplekumar Chalishajar. “Apex Calculus 4.0.” (2020). <http://www.apexcalculus.com/downloads>

Good news: your textbook for this class is available for free online in PDF format! You can also purchase a print version, if you prefer, from bookstore or Amazon.com at \$15. You can use whichever formats you want.

Optional Textbook OpenStax Calculus: Volume 1 (Available online in BBLearn)

Student License for Homework You will need to purchase Edfinity student license (<https://edfinity.com/>) (cost \$29). Edfinity is a full-featured homework system that supports mathematically-aware problems and supported by the National Science Foundation.

Wildcat Email / BBLearn Your Wildcat Mail is an official form of communication for Academic business. BBLearn is the official central resource for this course. On the BBLearn page for this course you will have access to weekly materials, regularly updated grades, and many other important links. It is highly recommended that you turn on notifications for both BBlearn and your Wildcat Mail on your phones and devices.

Grading Policy

Participation and group activities

Attendance is required for all meeting times for this course. During each class hour, you will be responsible for completing an activity sheet in small groups. Activity sheets will be due at the end of class meeting time. The agenda in BlackBoard will indicate which activities need to be printed out for class if you would like to print it ahead of time.

Homework assignment

Weekly homework due on Tuesday before class meeting time starting the second week will cover the previous week’s lesson content. They will help you prepare for weekly quiz that takes place on Friday class meeting time. They are turned in via Edfinity. Edfinity is a full-featured homework system that supports mathematically-aware problems and supported by the National Science Foundation. You will need to purchase Edfinity student license (cost \$29). One lowest homework score will be dropped.

Quizzes

There will be one quiz assigned each week starting the second week on Fridays when class is in session and when we do not have exams during class meeting time. One lowest quiz score will be dropped.

Exams

There will be two midterm exams scheduled on 9/23/2022 and 11/4/2022. If you must miss an exam due to extenuating circumstances, you **MUST** communicate with the instructor **BEFORE** the day of the exam. Calculators, books, phones and notes are not permitted on any exam unless otherwise specified by the instructor.

The final exam will be cumulative and scheduled at 8 am on Monday, December 12, 2022. Due to the large breadth of topics covered throughout the course, it is recommended that you regularly review finished assigned activities to keep the material fresh for the final.

Grading Policy

Grades are weighted by category as follows:

Participation: 5% Homework Assignments: 15% Quizzes: 20% Midterm Exams: 35% Final Exam: 25%

Letter grade ranges are set as follows:

A-/A: 90 - 100% B-/B/B+: 80 - 89% C-/C/C+: 70 - 79% D: 60 - 69% F: Below 60%

University Policies and Campus Resources

Academic integrity

Students are expected to be familiar with the University's Academic Integrity Policy. The policy on academic integrity and other resources related to student conduct can be found at: <http://www.csuchico.edu/sjd/integrity.shtml>.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, please contact me as soon as possible. Please also contact the Accessibility Resource Center as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. The Accessibility Resource Center is located in Student Services Center 170 or can be reached at 530-898-5959. <http://www.csuchico.edu/arc> Special accommodations for exams require ample notice to the testing office and must be submitted to the instructor well in advance of the exam date.