Math 0120 Business Calculus

Student Guidelines and Syllabus

Textbook

Brief Applied Calculus, Seventh Edition, by Geoffrey C. Berresford and Andrew M. Rockett; Brooks/Cole CENGAGE Learning. There is a link in Canvas which includes the purchase of the electronic version of the textbook onto your tuition statement if you do not 'opt out'. This purchase offers more than what is necessary. The only requirement to this course is the textbook. Students may choose to use the fifth, sixth or a used seventh edition, which may be available at a lower cost. If you choose to purchase it separately, you should choose the 'opt out' option prior to the add/drop deadline and visit http://calculus.math.pitt.edu and click the *Textbook Information* link.

Course Prerequisites

Minimum math placement score of 61 or Math 0031 with minimum grade of C.

Course Description

This course is designed for students in business, economics, and other social sciences. It introduces the basic concept of limit and its application to continuity, differentiation, integration, maximization, minimization and partial derivatives. Applications to the social sciences, especially business and economics, are stressed. The calculus of trigonometric functions is not covered.

Course Organization

The course consists of lecture and recitation components. Each student must register for a recitation that is associated with the lecture that he or she is attending. Lectures are M, W, F. Recitations are scheduled on Tu and Th of each week. Recitations will be devoted to problem solving and quizzes. Each scheduled recitation will have its assigned TA. The student should read each section before the lecture on that section.

Homework

Homework will be done online. The URL for your calculus homework is https:webwork.math.pitt.edu/Math0120-xxxxx with xxxxx replaced by the five digit class number for your section. Alterntively, you can go to https://webwork.math.pitt.edu and select your course from a list of available courses. You will need to log in with your Pitt username and password. Once you log in, you will see a list of available homework assignments and due dates.

Office Hours

Your instructor will announce his office hours.

Tutoring

The Math Assistance Center offers free tutoring by appointment, including same-day appointments for those who need immediate assistance. Appointments can be made within Pathways.

The MAC offers assistance with all courses in the math department in the range 0010-0413. In particular, the MAC is able to assist with all calculus courses (MATH 0220-0240).

Please see the MAC's website for instructions on how appointments are made as well as an outline of what you can expect. MAC Website

Note: unlike previous semesters, the MAC is staffed solely by undergraduate students and graduate TA's no longer hold office hours within the MAC. Graduate student office hours will be posted on the MAC website, but graduate students are no longer affiliated with the MAC.

Learning Outcomes

Students of the course will be able to:

- Find limits of functions presented as graphs, tables, or algebraic expressions.
- Use the concept of limit to define the derivative of a function.
- Differentiate functions involving powers, exponentials, and logarithms.
- Apply the concepts of differentiation to solve optimization problems.
- Use the derivative to hand sketch the graphs of functions involving powers, exponentials, and logarithms.
- Find indefinite integrals of functions involving powers, exponentials, and logarithms.
- Find definite integrals of appropriate functions.
- Apply the definite integral to solve problems.
- Find partial derivatives of functions of two variables.
- Apply the method of Lagrange multipliers to solve constrained optimization problems.

Grade Policy

The students course grade will be based solely on her/his performance on the Homework, the quizzes and examinations as follows:

Homework	15%
Quizzes	15%
Exam #1	15%
Exam #2	15%
Exam #3	15%
Departmental Final Exam	25%

Final Grade Policy

The one-letter-grade rule applies: A student's course grade in Math 0120 will not exceed her/his grade on the Math 0120 Departmental Final Examination by more than one letter grade.

Final Exam Policy

All day sections will take a departmental final exam at a day and time to be scheduled by the registrar.

Evening sections will meet through final exam week, and the final exam will be given during the last one or two scheduled class periods.

Calculator Policy

A graphing calculator or graphing software may be useful for some of the practice problems and online homework.

Your instructor may or may not permit usage of calculators on the midterm examinations.

Calculators will not be permitted on the Departmental Final Examination.

Exam Dates

See the class schedule for the dates of the three midterm exams. The date and time of the final exam will be announced by your instructor and in PeopleSoft.

Students with Disabilities

A student with a disability for which he or she is requesting an accommodation, is encouraged to contact both the instructor and the Office of Disability Resources and Services www.drs.pitt.edu, 140 William Pitt Union (412) 648-7890 as early in the term as possible.

Academic Integrity

Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity https://www.as.pitt.edu/faculty/policies-and-procedures/academic-integrity-code may incur a zero score for the assessment in question. Additional sanctions may be imposed, depending on the severity of the infraction. Even during this COVID-19 pandemic, Academic Integrity policies will be enforced. If there is any doubt about the originality of a student's submission for an assessment, they may be asked to explain their work during a one-on-one meeting with their instructor. If the student's explanations are unsatisfactory, they may receive a zero score for the assessment, or the instructor may choose to administer an alternative assessment in a different format.

Please note, in particular, that Pitt has a data sharing arrangement with Chegg.com that enables us to identify instances in which Chegg.com has been used to cheat on assessments. Consequences of being caught in this academic integrity violation have included zero scores on assessments and F grades for the course.

Health and Safety

In the midst of this pandemic, it is extremely important that you abide by public health regulations and University of Pittsburgh health standards and guidelines. While in class, at a minimum this means that you must wear a face covering and comply with physical distancing requirements; other requirements may be added by the University during the semester. These rules have been developed to protect the health and safety of all community members. Failure to comply with these requirements will result in you not being permitted to attend class in person and could result in a Student Conduct violation. For the most up-to-date information and guidance, please visit coronavirus.pitt.edu and check your Pitt email for updates before each class.

Diversity and Inclusion

The University of Pittsburgh does not tolerate any form of discrimination, harassment, or retaliation based on disability, race, color, religion, national origin, ancestry, genetic information, marital status, familial status, sex, age, sexual orientation, veteran status or gender identity or other factors as stated in the University's Title IX policy. The University is committed to taking prompt action to end a hostile environment that interferes with the University's mission. For more information about policies, procedures, and practices, see: https://www.diversity.pitt.edu/civil-rights-title-ix-compliance- policies-procedures-and-practices.

Copyright Statement

Some of the materials in this course may be protected by copyright. United States copyright law, 17 USC section 101, et seq., in addition to University policy and procedures, prohibit unauthorized duplication or retransmission of course materials. See https://www.library.pitt.edu/copyright-pitt .

Statement on Classroom Recording

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities not already recorded by the instructor, without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.