

MAT 143 – Brief Calculus| Summer I 2023

Professor: Cheng Peng, Ph.D.

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Office Hours: Mon/Tue/Wed/Thu: 9:00 AM – 10:30 AM

The last day to withdraw from this course is Wednesday, June 28, 2023.

Required Materials: *Calculus and Its Applications, 12th ed (Pearson, 2019).*, by Bittinger, Ellenbogen, and Surgent

Course Description: An intuitive approach to calculus with emphasis on conceptual understanding and applications to business. Topics include differentiation, curve sketching, optimization, integration, and partial derivatives.

Course Student Learning Outcomes: Upon completion of this course, students will be able to:

- explain the concept of a limit and how it is used to make sense of the slope of a tangent line to a given curve and the instantaneous rate of change.
- compute limits, derivatives, partial derivatives, and integrals using a variety of techniques.
- apply properties of derivatives to solve problems involving marginal cost, curve sketching, optimization, and elasticity of demand.
- set up definite integrals to solve problems arising in business.
- use reasoning & correct mathematical notation to offer written solutions to multistep problems.

General Education Student Learning Outcomes: This course satisfies the West Chester University general education requirement for Mathematics. The general education goals for this course are as follows:

- Critical Thinking: using reasoning and problems solving skills to develop the behavior of events.
- Quantitative Analysis: using mathematical measures and calculations to understand the behavior of events.

Attendance Policy: Attendance will be taken every day. Students are urged not to miss class meetings. Each student will be held responsible for all the material discussed in class. Students are expected to observe appropriate classroom behavior.

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|--------------------|--|----------------|
| Evaluation: | 3 in-class midterm exams (6/5, 6/12, 6/20) | 45% (15% each) |
| | D2L Daily Quizzes | 25% |
| | Cumulative Final | 25% |
| | Attendance | 5% |

Final Exam Schedule: 10:30 AM – 12:30 PM, Thursday, 6/29/2023

Policies for Exams, Quizzes, and Assignments:

All Exams are cumulative. Make-up exams are given only in the event of an emergency. If you must miss an exam, please email me before the time of the exam.

Daily Quizzes will be given via D2L every day. I will never give a quiz and an exam on the same day. I will make the quizzes available on D2L every day. You need to complete it before the next class meeting. There will be no make-up daily quizzes!

Missed Exams can only be made up with a valid, verifiable, written, university-approved excuse. any makeup exam must be completed before the next exam. Missed exams/quizzes are given a score of 0.

A letter grade will be assigned based on performance in the course according to the following scale:

| Grade | Quality Points | Percentage Equivalents | Interpretation |
|-------|----------------|------------------------|----------------|
| A | 4.00 | 93-100 | Excellent |
| A- | 3.67 | 90-92 | |
| B+ | 3.33 | 87-89 | Superior |
| B | 3.00 | 83-86 | |
| B- | 2.67 | 80-82 | |
| C+ | 2.33 | 77-79 | Average |
| C | 2.00 | 73-76 | |
| C- | 1.67 | 70-72 | |
| D+ | 1.33 | 67-69 | Below Average |
| D | 1.00 | 63-66 | |
| D- | 0.67 | 60-62 | |
| F | 0 | < 60% | Failure |

Refer to the Undergraduate Catalog for a description of NG (No Grade), W, Z, and other grades.

Course Policies and Resources:

- I set up a course web page to post all course materials brief notes and solutions to the daily quizzes.
- Please preview the materials (based on the daily topics listed on the course web page) so you are ready to discuss the material to be covered in the class.
- The daily quizzes will be administered through D2L. I will open the quiz after each class meeting. You must complete the quiz before the next class meeting. All daily quizzes are open book and note.
- All exams are closed books and notes.

- Make good use of my office hours.
- The university and the Department of Mathematics offer free tutoring services. More information will be posted on the course web page when it is available.
- I will answer course-related emails no later than 24 hours after I receive them.

This syllabus and schedule are subject to change in the event of extenuating circumstances.

Class Cancellation Policy:

In the event I am unable to meet a class, I will:

- notify you in person at a prior meeting to that effect, or
- an official class cancellation notification will be distributed via email.

Tentative Schedule

| | Weekday | Sections (Textbook) | Class Notes | Exams/quizzes |
|-------------|----------------|--------------------------------|---------------------|---|
| 5/30 | Tuesday | 1.1, 1.2, 1.3 | Note 1 | Daily quiz 1 |
| 5/31 | Wednesday | 1.4, 1.5 | Note 2 | Daily quiz 2 |
| 6/1 | Thursday | 1.6, 1.7 | Note 3 | Daily quiz 3 |
| | | | | |
| 6/5 | Monday | 1.8 | Note 4 (Rev Sheet) | Exam 1 [11:45 AM – 12:45 PM] |
| 6/6 | Tuesday | 2.1, 2.2, 2.3 | Note 4 | Daily quiz 4 |
| 6/7 | Wednesday | 2.4, 2.5, 2.6 | Note 5 | Daily quiz 5 |
| 6/8 | Thursday | 3.1 | Note 6 | Daily quiz 6 |
| | | | | |
| 6/12 | Monday | 3.2, | Note 7 (Rev Sheet) | Exam 2 [11:45 AM – 12:45 PM] |
| 6/13 | Tuesday | 3.3, 3.4, | Note 8 | Daily quiz 7 |
| 6/14 | Wednesday | 3.5, 3.6*, 3.7, | Note 9 | Daily quiz 8 |
| 6/15 | Thursday | 3.8, 4.1. | Note 10 | Daily quiz 9 |
| | | | | |
| 6/19 | Monday | Juneteenth, no class! | | |
| 6/20 | Tuesday | 4.1 | Note 10 (Rev Sheet) | Exam 2 [11:45 AM – 12:45 PM] |
| 6/21 | Wednesday | 4.2, 4.3 | Note 11 | Daily quiz 10 |
| 6/22 | Thursday | 4.4, 4.5, | Note 12 | Daily quiz 11 |
| | | | | |
| 6/26 | Monday | 5.1, 6.1, | Note 13 | Daily quiz 12 |
| 6/27 | Tuesday | 6.2, 6.3*, | Note 14 | No daily quiz |
| 6/28 | Wednesday | Final Review | Review sheet | No daily quiz |
| 6/29 | Thursday | Final Exam | | Final Exam [10:30 AM – 12:30 PM] |

University Policies Resources

ACADEMIC & PERSONAL INTEGRITY

It is the responsibility of each student to adhere to the university's standards for academic integrity. Violations of academic integrity include any act that violates the rights of another student in academic work, that involves misrepresentation of your own work, or that disrupts the instruction of the course. Other violations include (but are not limited to): cheating on assignments or examinations; plagiarizing, which means copying any part of another's work and/or using ideas of another and presenting them as one's own without giving proper credit to the source; selling, purchasing, or exchanging of term papers; falsifying of information; and using your own work from one class to fulfill the assignment for another class without significant modification. Proof of academic misconduct can result in automatic failure and removal from this course. For questions regarding Academic Integrity, the No-Grade Policy, Sexual Harassment, or the Student Code of Conduct, students are encouraged to refer to the Department Undergraduate Handbook, the Undergraduate Catalog, the Ram's Eye View, and the University website at www.wcupa.edu.

STUDENTS WITH DISABILITIES

If you have a disability that requires accommodations under the Americans with Disabilities Act (ADA), please present your letter of accommodations and meet with me as soon as possible so that I can support your success in an informed manner. Accommodations cannot be granted retroactively. If you would like to know more about West Chester University's Services for Students with Disabilities (OSSD), please visit them at 223 Lawrence Center. Their phone number is 610-436-2564, their fax number is 610-436-2600, their email address is ossd@wcupa.edu, and their website is <https://www.wcupa.edu/universityCollege/ossd/>. In an effort to assist students who either receive or may believe they are entitled to receive accommodations under the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973, the University has appointed a student advocate to be a contact for students who have questions regarding the provision of their accommodations or their right to accommodations. The advocate will assist any student who may have questions regarding these rights. The Director for Equity and Compliance/Title IX Coordinator has been designated in this role. Students who need assistance with their rights to accommodations should contact them at 610-436-2433.

EXCUSED ABSENCES POLICY

Students are advised to carefully read and comply with the excused absences policy, including absences for university-sanctioned events, contained in the WCU Undergraduate Catalog. In particular, please note that the "responsibility for meeting academic requirements rests with the student," that this policy does not excuse students from completing required academic work, and

that professors can require a “fair alternative” to attendance on those days that students must be absent from class in order to participate in a University-Sanctioned Event.

REPORTING INCIDENTS OF SEXUAL VIOLENCE

West Chester University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to comply with the requirements of Title IX of the Education Amendments of 1972 and the University’s commitment to offering supportive measures in accordance with the new regulations issued under Title IX, the University requires faculty members to report incidents of sexual violence shared by students to the University’s Title IX Coordinator. The only exceptions to the faculty member’s reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. **Faculty members are obligated to report sexual violence or any other abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred to the person designated in the University Protection of Minors Policy.** Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is set forth at:

<https://www.wcupa.edu/admin/diversityEquityInclusion/sexualMisconduct/default.aspx>

INCLUSIVE LEARNING ENVIRONMENT AND ANTI-RACIST STATEMENT

Diversity, equity, and inclusion are central to West Chester University’s mission as reflected in our [Mission Statement](#), [Values Statement](#), [Vision Statement](#), and [Strategic Plan: Pathways to Student Success](#). We disavow racism and all actions that silence, threaten, or degrade historically marginalized groups in the U.S. We acknowledge that all members of this learning community may experience harm stemming from forms of oppression including but not limited to classism, ableism, heterosexism, sexism, Islamophobia, anti-Semitism, and xenophobia, and recognize that these forms of oppression are compounded by racism.

Our core commitment as an institution of higher education shapes our expectation for behavior within this learning community, which represents diverse individual beliefs, backgrounds, and experiences. Courteous and respectful behavior, interactions, and responses are expected from all members of the University. We must work together to make this a safe and productive learning environment for everyone. Part of this work is recognizing how race and other aspects of who we are shape our beliefs and our experiences as individuals. It is not enough to condemn acts of racism. For real, sustainable change, we must stand together as a diverse coalition against racism and oppression of any form, anywhere, at any time.

Resources for education and action are available through WCU’s [Office for Diversity, Equity, and Inclusion](#) (ODEI), DEI committees within departments or colleges, the student [ombudsperson](#), and centers on campus committed to doing this work (e.g., [Dowdy Multicultural Center](#), [Center for Women and Gender Equity](#), and the [Center for Trans and Queer Advocacy](#)).

Guidance on how to report incidents of discrimination and harassment is available at the University’s [Office of Diversity, Equity, and Inclusion](#).

EMERGENCY PREPAREDNESS

All students are encouraged to sign up for the University's free WCU ALERT service, which delivers official WCU emergency text messages directly to your cell phone. For more information, visit www.wcupa.edu/wcualert. To report an emergency, call the Department of Public Safety at 610-436-3311.

ELECTRONIC MAIL POLICY

It is expected that faculty, staff, and students activate and maintain regular access to University provided e-mail accounts. Official university communications, including those from your instructor, will be sent through your university e-mail account. You are responsible for accessing that mail to be sure to obtain official University communications. Failure to access will not exempt individuals from the responsibilities associated with this course.