Towson University
Department of Mathematics
MATH 273: Calculus I
Syllabus for Spring 2019

Instructor Information

Instructor: Vince Guingona
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Course Location and Meeting Times:
Monday, 8 - 9:50am, YR 103; Wednesday, 8 - 9:50am, YR 126; Friday, 8 - 8:50am, YR 126

Student Office Hours: Monday and Wednesday, 2 - 3:30pm

Prerequisites: MATH 119 or a qualifying score on the Math Placement exam.

Textbook: *Calculus Volume 1* from OpenStax. Print ISBN: 193816802X; Digital ISBN: 1947172131. https://openstax.org/details/calculus-volume-1.

Your textbook for this class is available for free online, in web view and PDF format. You can also purchase a print version, if you prefer, from OpenStax on Amazon.com. If you buy on Amazon, make sure you use the link on your book page on openstax.org so you get the official OpenStax print version. (Simple printouts sold by third parties on Amazon are not verifiable and not as high-quality.)

Course Webpage: A Blackboard webpage has been set up for this course and is located at https://blackboard.towson.edu. All announcements, course materials and grades will be posted there.

Course Description: Functions, limits, and continuity; differentiation of algebraic and trigonometric functions; mean value theorem; differentials; introduction to integration; applications. Four lecture hours and one laboratory hour per week.

Course Objectives: Besides introducing students to the topics described in the course description above, the course aims to help develop certain general skills, with emphasis on numeracy, algebraic manipulation skills and critical thinking. In particular, students will: construct and evaluate logical arguments; apply and adapt a variety of appropriate strategies to solve mathematical problems; recognize and apply mathematics in contexts outside of mathematics; organize and consolidate mathematical thinking through written and oral communication.

Course Content: Over the course of the semester, we will cover the material detailed in the table below.

	Topic	**Overview**	**Textbook Sections**
Week 1	Functions and models	Functions, function notation, graphing and domain/range	1.1–1.5
Weeks 2–3	Limits and continuity	Limits and their properties, and continuity	2.1–2.5, 4.6
Weeks 4–7	Derivatives	Definition of derivative, rules for differentiation and implicit differentiation	3.1–3.9
Weeks 8–11	Applications of differentiation	Related rates, graph sketching, optimization problems, L'Hospital's rule and Newton's method	4.1–4.10
Weeks 12–15	Integration	Definite/indefinite integrals, the Fundamental Theorem of Calculus, u-substitution	5.1–5.7

Calculator Policy: All quizzes and exams for the course will be written so that they may be taken without the use of a calculator. Consequently, the use of calculators on quizzes or exams is prohibited.

Grading Policy: Your grade is dependent upon how well you demonstrate your comprehension of the subject through completion of the homework assignments, labs, quizzes and exams. The course will be scored out of 1000 points, and the weights of these assessments can be seen in the table below.

Assignment Type	**Points Possible**	**Percentage**
Midterm Exams	3×150 points = 450 points	45%
Web Homework	100 points	10%
Quizzes	10×10 points = 100 points (Lowest quiz score dropped)	10%
Labs	100 points	10%
Final Exam	250 points	25%
Total	1000 points	100%

The grading scale will be no more harsh than the scale that follows.

Total Points	Grade
1000–930	A
929–900	A-
899–870	B+
869–830	B
829–800	B-
799–770	C+
769–700	C
699–670	D+
669–600	D
599–0	F

Midterm Exams: In class midterm exams are worth 450 points. There will be three exams, worth 150 points each, given throughout the semester. The dates of these exams can be found in the Important Dates section below.

Final Exam: The final exam is worth 250 points and will be held during the final exam period scheduled for our course section. This test is cumulative (covers material from the entire semester).

Homework Assignments: WebWork (or web homework) will be assigned once a week and is worth a total of 100 points. The goal of web homework is to let you practice the routine exercises and provide you with immediate feedback. A typical web homework assignment will have 7–12 problems. In most cases, you will have up to 6 attempts to solve a problem correctly. The link to web homework is posted on BlackBoard. Most of web homework assignments will be due on Wednesdays at 11:59PM, and the dates of these assignments can be found in the Important Dates section below.

Suggested homework questions will also be given at the end of every section; these questions will not be collected. Only odd numbered questions will be assigned so that you can check your answers in the back of the textbook and ask questions if necessary. These problems are the exercises that appear at the end of each section in our textbook.

Quizzes: Throughout the course of the semester there will be 11 short quizzes, each worth 10 points. Your lowest quiz grade will be dropped from your final grade. Often these quizzes will require fluency in material that has been covered very recently. I recommend you make every effort to keep up with the material presented in lecture and complete the corresponding homework problems right after they have been assigned. The dates of the quizzes can be found in the Important Dates section below.

Labs: Labs are worth a total of 100 points. Labs using SageMath will take place 7 times throughout the semester. Students will have time to work on the labs during class, and may be able to finish them during the class period. Labs will be due during the next course meeting. All labs will be available online at http://wp.towson.edu/math273.

Important Dates:

Classes Begin	January 28
Quiz 1	January 30
Web Homework 0	February 3
Quiz 2	February 6
Web Homework 1	February 6
Quiz 3	February 13
Web Homework 2	February 13
Quiz 4	February 20
Web Homework 3	February 20
Exam 1	February 27
Web Homework 4	February 27
Quiz 5	March 6
Web Homework 5	March 6
Quiz 6	March 13
Web Homework 6	March 13
Spring Break (No Classes)	March 17–24
Quiz 7	March 27
Web Homework 7	March 27
Exam 2	April 3
Web Homework 8	April 3
Last Day to Withdraw	April 8
Quiz 8	April 10
Web Homework 9	April 10
Quiz 9	April 17
Web Homework 10	April 17
Quiz 10	April 24
Web Homework 11	April 24
Quiz 11	May 1
Web Homework 12	May 1
Exam 3	May 8
Web Homework 13	May 8
Web Homework 14	May 14
Last Day of Classes	May 14
Final Exam	May 20

Attendance: As in all TU classes, regular class attendance is expected. If you are absent from class, it is your responsibility to get any missed information from your classmates. Moreover, it is your responsibility to make a case that any excused absences are documented.

It is TU policy to excuse student absences for the following reasons: illness or injury when the student is unable to attend class; religious observance where the nature of the observance prevents the student from attending class; participation in University activities at the request of University authorities; and compelling verifiable circumstances beyond the control of the student. Absences that do not fall in any of these four categories are unexcused. In case of a scheduled excused absence, the student must provide documentation at least one week prior

to the date of the absence for it to be excused; otherwise, documentation must be provided as soon as possible.

Make-ups and Late Work: Late WebWork or lab assignments will not be accepted, and no make-up quizzes will be given. In case of a documented excused absence (see above), you will be exempted from that assessment and the respective grade simply will not be a part of your grade record. If you miss an exam due to a documented excused absence, I will work with you to find a reasonable alternative accommodation.

Towson Academic Integrity Policy: This class is conducted in accordance with the Towson University Code of Conduct as described in the Towson University Catalog. This code prohibits "all forms of dishonesty including cheating (and) plagiarism." Plagiarism is copying the words of another or the use of ideas of another without proper citation.

For this class, cheating or plagiarism in any form is unacceptable and a penalty commensurate with the offense will be applied. If any potential violation of the academic integrity policy occurs, the course instructor will meet with the student to present the evidence of a violation and request an explanation. If the faculty member determines that a violation has occurred, the faculty member informs the student, in writing, of the academic penalty and of the student's rights of appeal. The range of penalties includes deduction of points or rejection of assignment, failure of course, or a more severe disciplinary action by university authorities. The more severe the violation (in terms of extensiveness and intentionality), the more severe the penalty.

Disabilities: This course is in compliance with Towson University policies for students with disabilities. Students with disabilities are encouraged to register with Disability Support Services (DSS), Administration Building, Rooms 232-235, (410)704-2638. Students who suspect that they have a disability but do not have documentation are encouraged to contact DSS for advice on how to obtain appropriate evaluation. A memo from DSS authorizing your accommodation is needed before any accommodation can be made.

Diversity: In accordance with the Towson University Strategic Plan, the FCSM Diversity Action Plan, and the Department of Mathematics Diversity Action Plan, everyone participating in this course is expected to be respectful of each other without regard to race, class, linguistic background, religion, political beliefs, sex, gender identity or expression, sexual orientation, ethnicity, age, veteran's status or physical ability. If you feel these expectations have not been met, please speak with Dr. Goode at `egoode@towson.edu`.