Course Description and Objectives.
This is the first course of the Calculus sequence. The concept of derivative and its underlying notion of limit will be introduced as well as techniques of differentiation and integration. Applications such as related rates, analysis of graphs of functions, and optimization, are an important part of the course.
Upon completion of the course, students should demonstrate the following: strong computational skills to find limits, derivatives, and basic anti-derivatives; a good understanding of the concepts used to develop limits, continuity and differentiation; reasoning skills using calculus to solve applied problems.

Prerequisites.
A grade of C or better in Precalculus Algebra and Trigonometry (MAC 1147), or equivalently a C or better in both Precalculus Algebra (MAC 1140) and Trigonometry (MAC 1114). For students with no prior college coursework, an appropriate score on the ALEKS test can be used.
This course assumes that students have strong precalculus skills on day 1. To succeed in Calculus 1, students are assumed to have essential skills in algebra and in trigonometry.
The following link contains precalculus review problems that students should do prior to the start of the term: https://mathstat.fiu.edu/useful-information/math-resources/calculus-ii/precalculus-trig-review.pdf

Textbook.
Thomas’ Calculus, Early Transcendentals – 14th edition by Hass/Heil/Weir; Publisher: Pearson.
An access code can be purchased with the textbook or as a standalone item, either in the bookstore or online, but it must have a specific ISBN.
The website is fiu.mylabsplus.com
Username is your Panther Id Number and the password needs to be created by using “forgot the password”
The ISBN for the value pack (text and MyLabsPlus access code) is 9780135430903
The ISBN for the MyLabsPlus as a standalone item (without textbook) 9780135420683.
The specific chapters and sections to be covered are:
Ch. 2 Limits and Continuity. Sections 1-6 (2.3 is optional)
Ch. 3 Derivatives. Sections 1-11.
Ch. 4 Applications of Derivatives. Sections 1-8 (4.7 is optional)
Parametric Curves: Sections 11.1 and part of 11.2 dealing with differentiation.
Indefinite Integrals and the Substitution Method: Section 5.5
Grading Policy and Expectations.
The grade for the course will be based on the following work:

- 3 Tests..................................................40% (lowest 10%; the others 15% each)
- 8 Quizzes ..............................................30% (best 3 of Quizzes #1-4 and best 3 of Quizzes #5-8)
- MyLabsPlus (online homework)........10%
- Final Exam.............................................20%

Grading scale:
93-100 A; 90-92 A-; 87-89 B+; 83-86 B; 80-82 B-; 75-79 C+; 65-74 C; 50-64 D; below 50 F.

- There will be no makeups for tests or quizzes. A verifiable excuse for missing a test or quiz will be handled at the instructor’s discretion.
- There will be no extensions for the online homework. Please don’t wait till the last minute to start the assignments.
- Regular attendance is expected and encouraged. Up to 3 bonus points will be added to a test score for perfect attendance and punctuality during the days covering the material being tested. If you wish to take advantage of the bonus points, you must be in your assigned seat at the beginning of class and remain attentive and participating till the end of class. Cell phones should be off and out of sight during class.
- Each of the 8 quizzes will be given during the first 30 minutes of class. For each of the 3 tests, the 100 minutes of class are available.
- Calculators are not allowed during quizzes or tests.
- All students are expected to comply with the University Standards of Conduct for academic honesty and respect for self and others. Please see http://integrity.fiu.edu

Important Dates.
Jan. 15: Quiz 1; Jan. 22: Quiz 2; Jan. 29: Test 1
Feb. 12: Quiz 3; Feb. 19: Quiz 4; Feb. 26: Test 2
Monday, March 18........... Last Day to drop with DR grade.
March 19: Quiz 5; March 26: Quiz 6
April 2: Quiz 7; April 9: Quiz 8; April 16: Test 3
TBA: FINAL COMPREHENSIVE EXAM