CENTRAL CONNECTICUT STATE UNIVERSITY
DEPARTMENT OF MATHEMATICAL SCIENCES
SUMMER 2025

COURSE: MATH 116 (11)

TITLE: PRECALCULUS

PREREQUISITES: **Placement Exam or MATH 101 (C- or higher) or MATH 103 (C- or higher).** No credit given to students with credit for MATH 119, 124, 125, 135 or 152.

COURSE DESCRIPTION: **This course is a prerequisite for Calculus I (MATH 152). Calculus I is required for students pursuing a BA in mathematics or a BS with certification to teach secondary school mathematics. In addition, it is required for students majoring in computer science, earth science, chemistry, and physics and for students in the engineering transfer program. This course is also suited for students who are pursuing an elementary mathematics major (BS). Other students may elect this course to fulfill a general education requirement in Skill Area II. Students required to take both MATH 115 and MATH 116 may elect instead to take MATH 119, Pre-Calculus with Trigonometry, a four-credit course. Properties of the real numbers, functions and their graphs, polynomial, rational, exponential, and logarithmic functions are covered in this class.**

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SCHEDULE OF CLASSES: MTWR 1:00 – 3:00 PM in EDB 106

OFFICE HOURS: MTWR 12:20 – 12:55 PM in EDB 106

TEXTBOOK: **Precalculus. Enhanced with Graphing Utilities. Sullivan and Sullivan III, 8th edition, published by Pearson Education, Inc. ISBN 13: 822-0-11321952-2.**

COVEREGE: **Selected sections from Appendices A1 to A9 and Chapters 1, 2, 3, 4 and 5 will be covered.**

ATTENDANCE: **The material covered by this course will be discussed and explained clearly in class and proper examples will be solved. Therefore, regular class attendance is important.**

EXAMINATIONS: **There will be three tests and three take-home exams during the session and a cumulative final exam on Thursday, June 27, from 1:00 to 3:00 PM in EDB 126. The examination problems will be similar to those solved in class or given on tests or take-home exams.**

HOMEWORK: **The best way to learn mathematics is to solve as many problems as possible. In the list below are given the suggested homework assignments that you have to solve AFTER the corresponding material is covered in class, but BEFORE you start working on the problems from your corresponding take-home exam.**

GRADING:	THREE TESTS	45%
	THREE TAKE-HOME EXAMS	30%
	FINAL EXAM	25%

If you score 93% or more your final grade will be an A, 90% or more but less than 93% - A-, 87% or more but less than 90% - B+, 83% or more but less than 87% - B, and so on. Less than 60% is F.

NOTE: CELL PHONES AND OTHER COMMUNICATION DEVICES MUST BE TURNED OFF AT **ALL** TIMES DURING CLASS

UNIVERSITY POLICIES

1. **You must take the final examination on Thursday, June 26, 1:00 – 3:00 PM in EDB 106.**

2. **If you are a student with a documented disability, and would like to request academic accommodations, you are encouraged to contact Student Disability Services (SDS) at 860-832-1952, or email disabilityservices@ccsu.edu. Please visit the SDS website at http://www.ccsu.edu/sds/ to download an Intake form and documentation requirements. Temporary impairments may also qualify for accommodations. Central Connecticut State University provides reasonable accommodations in accordance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act for students with documented disabilities on an individualized basis.**

3. **In the event of a weather emergency which requires curtailment or cancellation of classes, listen to WTIC (1080 AM) or call 860-832-3333 for the "general snow message."**

4. **Students may drop a course by Monday, June 3 without permission and without any notation on the record (no "W" grade). The last day to withdraw from a course is Sunday, June 23 (a "W" grade will appear on the record for that course). It is strongly recommended that students consult with their academic advisors prior to deciding to withdraw. Cessation of attendance, notice to the instructor, or telephone calls to the Registrar's Office are not considered official notice of a student's intention to drop the course. After June 23 withdrawals are allowed only under extenuating circumstances and require approval of the course instructor and the department chair.**

5. **All students are expected to demonstrate integrity in the completion of their coursework. Academic integrity means doing one's own work and giving proper credit to the work and ideas of others. It is the responsibility of each student to become familiar with what constitutes academic dishonesty and plagiarism and to avoid all forms of cheating and plagiarism. Students who engage in plagiarism and other forms of academic misconduct will face academic and possibly disciplinary consequences. Academic sanctions can range from a reduced grade for the assignment to a failing grade for the course. From a disciplinary standpoint, an Academic Misconduct**

Report may be filed, and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion. For further information on academic misconduct and its consequences, please consult the Student Code of Conduct (http://www.ccsu.edu/StudentConduct) and the Academic Misconduct Policy (http://www.ccsu.edu/AcademicIntegrity).

6. Central Connecticut State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon age; ancestry, color; gender identity and expression; intellectual disability; learning disability; mental disorder; physical disability; marital status, national origin; race; religious creed; sex, (including pregnancy, transgender status, sexual harassment and sexual assault); sexual orientation; or any other status protected by federal or state laws. Any student who has concerns about this should contact the Office of Equity and Inclusion (OEI) at 860-832-1652, Student Affairs at 860-832-1601, or their faculty member. The OEI is located on the main floor of Davidson Hall, room 119.

7. Central Connecticut State University (CCSU) will not tolerate sexual misconduct against students, staff, faculty, or visitors in any form, including but not limited to: sexual assault, sexual exploitation, sexual harassment or stalking, as defined in CCSU policies. For additional information, please consult the CCSU policies at http://www.ccsu.edu/diversity/policies/index.html. **All faculty members and staff have a duty to report incidents of sexual harassment including sexual misconduct, intimate partner violence and stalking to Pamela Whitley, Title IX Officer, Office of Equity and Inclusion, Davidson Hall, 119.**

To file a report, contact: Equity and Inclusion (860-832-1652); Student Affairs (860- 832-1601); Student Conduct (860-832-1667) or the University Police (860-832-2375).

For support and advocacy, contact: Office of Victim Advocacy at 860-832-3795 or jflanagan@ccsu.edu; Student Wellness Services at 860-832-1945 (confidential), Women's Center at 860-832-1655, the local YWCA's Sexual Assault Crisis Services Hotline at 860-223-1787 (confidential) and Prudence Crandall Center for Domestic Violence (confidential) at 888-774-2900 (24-hour hotline).

MATH 116, Summer 2025, Tentative Timetable

Date	Chapter and Section	Important Information
5/27	A.1, A.9, A.10	Take-Home Exam = THE
5/28	A.3, A.4, A.5, A.6	
5/29	1.1, 1.2, 1.6, 1.3, 1.4	
6/2	1.5, 2.1, 2.2, 2.3, 2.4	
6/3	Review for Test 1, 2.5, 2.6	Try to finish THE 1 before class to ask questions
6/4	3.1, 3.3, 3.4	THE 1 Due online before 9 pm on Monday, June 3, or in class
6/5	3.5, Test 1, June 5	Test 1 is on A.1, A.3 – A.6, A.9, A.10, 1.1 – 1.5, 2.1 – 2.4
6/9	Review Test 1, 4.1, 4.2, 4.3	
6/10	4.3, A.7, 4.4	
6/11	4.5, 4.6, 4.7	
6/12	Review for Test 2, 5.1	Try to finish THE 2 before class to ask questions
6/16	5.2, 5.3, 5.4	THE 2 Due online before 9 pm on Sunday, June 15, or in class

6/17	5.5, Test 2, June 17	Test 2 is on 2.5, 2.6, 3.1, 3.3 – 3.5, A.7, 4.1 – 4.6
6/18	Review Test 2, 5.6, 5.7	Test 3 is on 5.1 – 5.8
6/23	5.8, Review for Test 3	Try to finish THE 3 before class to ask questions
6/24	Review, Test 3, June 24	THE 3 Due online before 9 pm on Monday, June 23 or in class
6/25	Review Test 3 and for the final exam	
6/26	Final Exam	Cumulative Final Exam on Thursday, June 26, 1:00–3:00 pm

Section	Suggested Homework Problems
A.1	11, 13, 15, 17, 19, 21, 27, 31, 33, 35, 37, 39, 41, 43, 49, 51, 59, 69 – 80, 97 – 106
A.3	1 – 15, 25, 31, 33, 37, 45, 49, 53, 57, 65, 69, 71, 73, 77, 83, 85, 87, 93, 99,101,103,113,125,135
A.4	1 – 6, 7, 9, 11, 13, 19, 21, 23, 25, 27
A.5	1 – 6, all odd from 15 to 35.
A.6	1 – 14,15,19,23,25,33,35,39,43,45,47,49,51,61,63,69,73,75,79,81,87,91,97,101,107,113,119
A.7	1 – 10, 15, 21, 29, 35, 43, 51, 57, 59, 65
A.9	1 – 14, 15, 17, 19, 21, 23, 27, 28, 29, 31, 33, 35, 41, 49, 53, 61, 67, 73, 77, 81, 87, 93, 99
A.10	1 – 10, 11, 13, 15, 21, 29, 37, 39, 47, 49, 53, 61, 63, 65, 67, 73, 77, 83, 87, 89
1.1	1 – 6, 7, 11, 27, 33, 35, 39, 45
1.2	1 – 10, 11, 15, 25, 31, 39
1.3	1 – 10, 11, 13, 15, 17, 19, 21, 23, 25, 33, 35, 37, 39, 45, 47, 49, 51, 53, 65, 67
1.4	1 – 4, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35
1.5	1 – 12, 13, 15, 19, 25, 39, 43, 45, 47, 51, 53, 59, 60, 61, 67, 73, 79, 93
1.6	1 – 8, 9, 15, 19, 23, 29, 31, 35, 37, 39, 41, 43, 45, 47
2.1	1 – 18, 19, 21, 23, 31, 37, 43, 49, 53, 55, 57, 59, 65, 67, 79, 83, 85, 89
2.2	1 – 10, 11, 13, 15, 19, 21, 23, 27
2.3	1 – 12, 13, 15, 17, 19, 21, 25, 29, 33, 35, 37, 39, 45, 47, 49, 51, 53, 54, 57, 65, 71
2.4	1 – 10, 11 – 18, 19 – 26, 27, 29, 31, 33, 39, 43, 49
2.5	1 – 6, 7 – 18, 19, 21, 23, 25, 27, 29, 39, 43, 45, 47, 49, 55, 65
2.6	1, 7, 9, 19, 21, 24, 25, 26
3.1	1 – 11, 13, 15, 21, 29
3.3	1 – 12, 13 – 20, 21, 22, 23, 25, 33, 39, 43, 49, 57, 61
3.4	3, 7, 9, 11, 13
3.5	3 – 6, 7, 9, 11, 13, 15, 17
4.1	8–16,17,19,21,23,24,25,26,27,29,35,39,43,45,47,49,51,55,57,61–84
4.2	5, 7, 9, 11, 13, 23, 25, 27, 29, 31, 33, 35, 37
4.3	5 – 10, 11, 17, 19, 21, 23, 25, 27, 29, 33, 41, 43, 45, 51, 53, 59, 61, 75, 79
4.4	3 – 6, 7, 9, 11, 15, 17, 21, 23, 25, 27, 31, 33, 35
4.5	5 – 14, 15 17, 19, 25, 27 – 32, 35, 45, 47, 49
4.6	2 – 6, 7, 9, 15, 33, 51
4.7	3, 4, 5 – 18, 19, 21, 23, 25, 33, 35, 39, 43
5.1	4 – 8, 9, 11, 13, 15, 21, 27, 29, 39, 41, 43
5.2	5 – 12, 13, 15, 17, 21, 23, 27, 31, 35, 39, 45, 47, 53, 55, 57, 63, 67, 71
5.3	6 – 14, 27, 29, 31, 35 – 42, 43, 45, 55, 65, 75, 81,
5.4	4–10,11,15,17,19,23,25,27,29,31,33,39,41,47,49,57,61,65–72,73,81,89,91,93,101, 103,105
5.5	1 – 12, 13, 15, 19, 21, 23, 25, 29, 31, 35, 37, 39, 43, 45, 47, 51, 57, 61, 63, 69, 71, 73, 79
5.6	5, 9, 13, 15, 21, 27, 31, 35, 41, 43, 51, 53, 55, 57, 61, 65, 71
5.7	7, 13, 15, 23, 31, 35
5.8	1, 3, 13, 23, 27