

**Fall 2017 Pre-Cal, K186, 31361, M, W 6:00pm – 7:40pm, room D210.
Professor James Chadic**

Prerequisite: MAT 172 or equivalent

Text: Precalculus Graphs and Models by John W. Coburn and J.D. Herdlick, a graphing calculator is also required.

Course Description: This course is about studying and understand functions and relations, including circular functions, operations on functions and their graphs. Students will have the opportunity to study exponential, logarithmic, and trigonometric functions, trig- identities and their applications, conic sections and introductory sequences and series.

Evaluations: Quizzes, Homework – 15%, 4 Exams, each Exams – 15%, and final exam – 25%.

Measurements: Minimum averages for each letter grades:

A	93%	B+	87%	C+	77%	D+	67%
A-	90%	B	83%	C	73%	D	63%
B-	80%	C-	70%	D-	60%		

Support Services: T.A.S.C, peers, or me during my office hours or by appointment.

Office Hours: M W 9:30 – 10:30 am, T, R 12:30 – 1:30 pm, F 11:00 am- 12:15 pm **Room C132**
Email: jchadic@trcc.commnet.edu **Office number: (860) 215 -9425**

Class Cancellation: In case of increment weather, check the college website for class cancellations or call 860-215-9000 for recorded message.

Plagiarism and Academic Honesty: At TRCC, we expect the highest standards of academic honesty. All students are expect 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 fill and a Faculty Hearing Board may impose sanctions such as probation, suspension or expulsion.

MyCommNet Alert: MyCommNet is a system that sends text messages and emails to anyone signed up in the event of a campus emergency. Additionally, TRCC sends messages when the college has a delay, or close due to weather. All students are encouraged to sign up for myCommNet Alert. A tutorial is available on the Educational Technology and Distance Learning Students page of the web site.

http://www.trcc.commnet.edu/div_it/educationaltechnology/Tutorials/myCommNetAlert/MIR3.html

Disabilities: If you have a disability that may affect your progress in this course, please meet with a Disability Service Provider (DSP) as soon as possible. Please note that accommodations cannot be provided until you provide written authorization from a DSP.

College Disabilities Service Provider:

- Matt Liscum, Counselor he can be reach at (860) 215-9265, and his office is at Room A113. He will be able to provide service for people that has learning disabilities, ADD/ADHD, Autism Spectrum, and Mental Health Disabilities.
- Elizabeth Wilcox, Advisor, she can be reach at (860) 215-9289, and her office is at Room A113 as well. She will be able to help people with medical, mobility, and sensory disabilities.

Digication Statement: All students are required to maintain an online learning portfolio in Digication that uses the college template. Through this electronic tool, students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her earning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

Board of Regents for Higher Education and Connecticut State Colleges and Universities Policy Regarding Sexual Misconduct Reporting, Support Services and Processes Policy:

Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus:

“The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking.”

Title IX Statement of Policy:

“Title IX of the Education Amendments Act of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students are protected by Title IX, regardless of their sex, sexual orientation, gender identity, part or full-time status, disability, race, or national origin, in all aspects of educational programs and activities.”

Please Report Student Incidents to: Edward A. Derr, Student Diversity and Title IX Coordinator
Admissions Welcome Center * Office A116
574 New London Turnpike, Norwich CT 06360
860.215.9255 * EDerr@trcc.commnet.edu

Course Objectives:

At the completion of MAT*186, the student will be able to do the following —

1. Evaluate a function at any given value of x .
2. Find the domain and range of a function.
3. Graph the function, using tables and transformations.
4. Graph piece-wise function
5. Determine whether a function is even or odd.
6. Identity local maxima, minima on the graph of functions and intervals of increase/decrease.

7. Model with functions.
8. Combine functions and find their compositions and inverse.
9. Graph Polynomials, find their zeroes, x-intercepts, analyze their end behavior. Use the factor theorem.
10. Graph rational functions and find their asymptotes.
11. Perform operations with complex numbers.
12. Find trigonometric form of a complex numbers.
13. Evaluate, graph exponential and logarithmic functions.
14. Solve exponential and logarithmic equations, model with exponential and logarithmic equations.
15. Find angle measure in radian and degrees.
16. Find all trigonometric ratios in a right triangle.
17. Find the values of trigonometric functions from the information given.
18. Solve a right triangle.
19. Solve a triangle using the law of sines and cosines.
20. Find trigonometric functions of real numbers using unit circle approaches.
21. Graph the trigonometric functions.
22. Use the trigonometric identities, addition, subtraction, double and half angle formula.
23. Evaluate inverse trigonometric functions.
24. Solve trigonometric equations.
25. Plot the complex numbers on the complex plane.
26. Use sequence notation to write sums.
27. Use factorial notation.
28. Use summation notation to write sums.
29. Model the real-life problems with arithmetic and geometric sequence.

Course Content:

1. Part 1.
 - 1.3, 2.1, 2.2,5.1, 5.2,5.3,5.4,5.5
2. Part 2
 - 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7, 6.8
3. Part 3
 - 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.1. 8.2, 8.5,8.6
4. Part 4
 - 10.1, 10.2, 10.3, 10.4, 10.5, 11.1, 11.2-11.4.

Assignments DUE DATES: Assignments such as quizzes, projects, homework, will be announce a week in advance. It is **your responsibility** to complete these assignments on time. **I will not accept LATE ASSIGNMENT, WITHOUT A PROPER REASON.**