

## MAT 115: Precalculus, Sections 001&002

Fall 2021, MWF, Moffett Center 009

### Contact Information:

Instructor: Nick Packauskas  
Email: [nicholas.packauskas@cortland.edu](mailto:nicholas.packauskas@cortland.edu)  
Office: Moffett Center 123B  
Office Hours: Mon. 10:00 - 11:00 AM  
Tue. 1:00 - 2:00 PM  
Wed. 10:00 - 11:00 AM  
Thurs. 1:00 - 3:00 PM

**Textbook** *Precalculus Essentials*, Ratti & McWaters,  
1st Edition, ISBN: 978-0-321-81696-2

**Prerequisites** Three units of Regents High School mathematics

You are welcome to schedule an appointment outside of the above office hours. The best way to schedule an appointment is via e-mail. I will do my best to respond to e-mails in a timely fashion, however **I am not guaranteed to respond to any e-mails sent after 5:00 PM on weekdays or on the weekends until the next business day.**

**Course Goals and Description:** This course will cover material that is necessary to succeed in a calculus course. We will cover the theory of functions, with specific attention to polynomial, exponential, logarithmic, and trigonometric functions.

**Course Website:** This course will make use of Blackboard. Useful links, announcements, and other files and information will be posted there. Students' progress will also be updated weekly via Blackboard. In addition, this course will use MyMathLab for part of the homework assignments. Access to and instructions for using MyMathLab will be posted on Blackboard.

**Participation and Attendance:** A major part of the learning experience is interacting with the material and fellow classmates. As such, attendance is **mandatory**. Maintaining regular attendance will factor into your final course grade (see grading policies below).

**Online Homework:** In order to gain a deep understanding of mathematics, it is necessary to practice working with the ideas and concepts on a regular basis. As such, there will be weekly online homework assignments due almost every week via MyMathlab. You can re-work the homework problems as many times as necessary before the due date. Maintaining a certain percentage of completion on the online homework will factor into your final course grade (see grading policies below).

**Quizzes and "Exams":** The course is separated into 28 standards or learning goals that provide a satisfactory background for calculus. Each week, there will either be a quiz over one of these standards, or an "Exam" consisting of 5 standard quizzes bundled together. Each quiz will be graded in a pass/fail format, with the option to correct minor errors. Students can retake each individual quiz up to two times. Final grades will be assigned based upon how many quizzes the student has passed by the end of the semester. For more details, see the grading policies below. Students can use a scientific calculator on quizzes and exams, but no graphing calculators, mobile devices, or calculators with a computer algebra system (CAS) are allowed. The tentative dates of the quizzes are listed in the attached schedule.

**Final Exam:** There will be a cumulative final at the end of the semester, which will be graded in the traditional way, with partial credit awarded. Students will need to score a minimum score to maintain their grade. If a student scores greater than a 90% on the final exam, their grade will increase by one letter grade. See the grading policies for full details. To determine when the final is, see the SUNY Cortland final exam schedule.

**How To Succeed:** In order to do well in the course, one should come to each class period ready to engage in class discussions and participate in group work with their peers. Reading the textbook to get a cursory knowledge of the topic for the day is crucial. A typical day in class will consist of a short lecture with examples, followed by engaging with the material in small groups. Learning is then solidified while completing the homework assignments for the week, which culminates in attempting the quizzes.

**Getting Help:** First and foremost, **ask questions!** If you are confused in class, then others will be too and will likely have the same questions as you. Asking questions is a crucial part of the learning process. If you find yourself struggling with a concept or need individual assistance, the best way to do this is by talking to the instructor during their office hours. Study groups are also strongly encouraged. Consider creating an email thread or group chat with other students in your class. You will likely need to come to office hours either to retake a quiz or ask for help on a particular topic.

**Cell Phones and Mobile Devices:** Learning mathematics requires active engagement, and as such, you should not be using cell phones during class for any reason. If you have to take an emergency call, please leave the room as to not distract others. **You may not use your cell phone or any other device with an internet connection for a calculator**, and smart watches should be removed during quizzes and exams. You may take notes on a tablet or laptop if you wish, but make sure it is not a distraction to others. **Using a mobile device during class for non-academic purposes is not allowed.**

**Makeups:** Makeup exams may **only** be given in extreme circumstances or for university sanctioned reasons. Be prepared to provide supporting documentation. If your conflict involves an issue that you knew about ahead of time, then you are required to discuss it with the instructor before the scheduled exam. If a solution has not been discussed ahead of time, receiving a makeup will be unlikely. Missing an exam or quiz does not affect your ability to retake the quizzes up to two times.

**Tokens:** Tokens can be exchanged for one-time “exemptions” to some of the above rules. For example, you can use a token in exchange for a third retake on a particular quiz, or an extension on one of the homework assignments, or to excuse an absence. Each student starts the course with three tokens. There may be opportunities to earn bonus tokens as the course proceeds.

**Summary of Grading Policies:** Below are the minimum criteria for securing the specified grade. For full details, see the grading policies below.

Grade	Quizzes Passed	Online Homework Completed	Attendance	Final Exam Score
A	22+	at least 85%	at least 90%	at least 70%
B	19-21	at least 75%	at least 80%	at least 60%
C	16-18	at least 65%	at least 70%	at least 50%
D	13-15	at least 55%	at least 60%	at least 40%
E	less than 13	less than 55%	less than 60%	less than 40%

Falling short or exceeding in some of the above criteria may result in awarding +/- modifiers on the grades rather than falling down or advancing to the next letter grade. The quizzes are the main factor for how grades will be assigned and will be used for midsemester evaluation.

Please see the “Grading Policies” document on Blackboard for full details of how the final grades will be assigned as well as more information on revisions and retakes.

**Disclaimer:** Should the need arise due to pandemic concerns or otherwise, the policies above may be updated. Students will be informed of any and all changes should they occur.

**Academic Integrity Statement:** All students are expected to uphold academic integrity standards. Plagiarism is defined as taking the ideas of others and using them as one's own without due credit. Students who cheat in examinations, course assignments, or plagiarize in this course may be disciplined in accordance with university rules and regulations. (College Handbook, Chapter 340)

**Disability Statement:** As part of SUNY Cortland's commitment to a diverse, equitable, and inclusive environment, we strive to provide students with equal access to all courses. If you believe you will require accommodations in this course, please place a request with the Disability Resources Office at [disability.resources@cortland.edu](mailto:disability.resources@cortland.edu) or call 607-753-2967. Please note that accommodations are generally not provided retroactively so timely contact with the Disability Resources Office is important. All students should consider meeting with their course instructor who may be helpful in other ways. (College Handbook, Chapter 745)

**Diversity Statement:** SUNY Cortland is dedicated to the premise that every individual is important in a unique way and contributes to the overall quality of the institution. We define diversity broadly to include all aspects of human difference. The College is committed to inclusion, equity, and access and thus committed to creating and sustaining a climate that is equitable, respectful and free from prejudice for students, faculty and staff. We value diversity in the learning environment and know that it enhances our ability to inspire students to learn, lead and serve in a changing world. We are committed to promoting a diverse and inclusive campus through the recruitment and retention of faculty, staff and students. As a community, we hold important the democracy of ideas, tempered by a commitment to free speech and the standards of inquiry and debate. To this end, we are dedicated to developing and sustaining a learning environment where it is safe to explore our differences and celebrate the richness inherent in our pluralistic society. (College Handbook, Chapter 130)

**Inclusive Learning Environment Statement:** SUNY Cortland is committed to a diverse, equitable and inclusive environment. The course instructor honors this commitment and respects and values differences. All students enrolled in this course are expected to be considerate of others, promote a collaborative and supportive educational environment, and demonstrate respect for individuals with regard to ability or disability, age, ethnicity, gender, gender identity/expression, race, religion, sex, sexual orientation, socio-economic status or other aspects of identity. In an environment that fosters inclusion, students have the opportunity to bring their various identities into conversation as they find helpful, but are not expected to represent or speak for an entire group of people who share aspects of an identity. If you have any questions or concerns about this statement, contact the Institutional Equity and Inclusion Office at 607-753-2263.

**Title IX Statement:** Title IX, when combined with New York Human Rights Law and the New York Education Law 129-B, prohibits discrimination, harassment and violence based on sex, gender, gender identity/expression, and/or sexual orientation in the education setting. The federal Clery Act and NY Education Law 129-B provide certain rights and responsibilities after an incident of sexual or interpersonal violence. When a violation occurs, victims and survivors are eligible for campus and community resources. Where the College has jurisdiction, it may investigate and take action in accordance with College policy. If you or someone you know wishes to report discrimination based in sex, gender, gender identity/expression, and/or sexual orientation, or wishes to report sexual harassment, sexual violence, stalking or relationship violence, please contact the Title IX Coordinator at 607-753-4550, or visit [cortland.edu/titleix](http://cortland.edu/titleix) to learn about all reporting options and resources. (Updated by SUNY Legal Feb. 1, 2018).

### Course Schedule:

This is a tentative schedule, and subject to change.

Week	Dates	Sections Covered	Quizzes
1	8/30 9/1 9/3	Intro 1.1: Graphs 1.2: Lines	Standard 1A
2	9/6 9/8 9/10	<b>NO CLASS - Labor Day</b> 1.3: Functions 1.4: A Library of Functions	Standard 1B
3	9/13 9/15 9/17	1.5: Transformations of Functions 1.5: Transformations Continued 1.6: Combinations of Functions	Standard 1F
4	9/20 9/22 9/24	1.7: Inverse Functions Catch-up/Review UNIT 1 QUIZZES	Standards 1C, 1E, 1E, 1G, 1H
5	9/27 9/29 10/1	2.1: Quadratic Functions 2.2: Polynomial Functions 2.3: Dividing Polynomials	Standard 2A
6	10/4 10/6 10/8	2.4: Zeros of Polynomials 2.5: Rational Functions 2.5: Rational Functions Continued	Last day for Unit 1 Retakes Standard 2D
7	10/11 10/13 10/15	3.1: Exponential functions 3.2: Logarithmic Functions Catch-up/Review	Standard 2F
8	10/18 10/20 10/22	<b>NO CLASS - Fall Break</b> Catch-up/Review UNIT 2 QUIZZES	Standards 2B, 2C, 2E, 2G, 2H
9	10/25 10/27 10/29	3.3 Rules of Logarithms 4.1: Angles 4.2: The Unit Circle	Standard 3A
10	11/1 11/3 11/5	4.2: The Unit Circle Continued 4.3: Graphs of Sine and Cosine 4.4: Graphs of Tangent	Last Day for Unit 2 Retakes Standard 3D
11	11/8 11/10 11/12	4.5: Inverse Trig Functions 4.5: Inverse Trig and Solving Equations 4.6: Right Triangle Trigonometry	Standard 3F
12	11/15 11/17 11/19	Catch-up/Review Catch-up/Review UNIT 3 QUIZZES	Standards 3B, 3C, 3E, 3G, 3H
13	11/22 11/24 11/26	4.7: Trig Identities <b>NO CLASS - Thanksgiving Break</b> <b>NO CLASS - Thanksgiving Break</b>	
14	11/29 12/1 12/3	4.8: Sum and Difference Formulae 5.1 Law of Sines 5.2 Law of Cosines	Standard 4A
15	12/6 12/8 12/10	5.3 Polar Coordinates Catch-up/Review Catch-up/Review	Last Day for Unit 3 Retakes Standard 4C
15	12/13 – 12/17	<b>Finals Week</b>	