

Math 100: Precalculus Spring 2024

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Office Hours: Tuesday 10:00 am to 12:00 pm and Thursday 12:00 pm to 2:00 pm
All office hours are by appointment. To make an appointment, please use the link:
<https://rreakes24.youcanbook.me>
If these hours do not work with your schedule, please call or email me to set up a Zoom Meeting appointment. I will do my very best to accommodate both of our schedules.

Description: Precalculus provides an opportunity to learn skills such as trigonometry, exponential and logarithmic functions, and algebra. This background will prepare you to succeed in calculus.

Learning Outcomes: By the end of the course, successful students will be able to:

- understand and manipulate various types of functions including lines, polynomials, trigonometric functions, exponential functions, and logarithms
- understand and apply algebraic techniques including graphing, arithmetic involving fractions and exponents, factoring, and solving equations
- understand and apply geometric shapes such as right triangles, spheres, and circles

Note: May not be taken if credit has been received for MATH 111 or higher. Does not substitute for MATH 111, INQ 240 or INQ 241.

Text: Precalculus, 7e by Larson and Hostetler
Free Link: <https://www.spps.org/cms/lib010/MN01910242/Centricity/Domain/6062/PreCalculus%20Text.pdf>

Recommended Technology: A laptop for class is not required, but very helpful! A phone can be used in its place.

Academic Integrity: You are expected to be familiar with the Academic Integrity Code outlined in the booklet, Academic Integrity at Roanoke College.

https://www.roanoke.edu/inside/a-z_index/academic_affairs/academic_integrity.

You are expected to do all work graded for accuracy independently. This includes tests, quizzes, and graded practice problems. You are allowed to work alone, with a partner or a group on the daily independent practice problems which will only be checked for completion.

Policy on expected number of hours of work per week: Per the Academic Catalog, "For each one-unit course, students are expected to complete 12 hours of work inside and outside of class each week." Realistically, this may vary due to the strength of the background of each individual student with respect to course content.

Attendance: Class attendance is a very important aspect of a student's success in this course. The student is expected to attend every class and is accountable for any missed classes.

Grading:

Completion of Watching Videos	5%
Completion of Independent Practice Problems:	10%
Accuracy of Graded Practice Problems	15%
Mastery Test Grade:	70%

Grades will be assigned using the scale below:

A	93-100	C	73-76
A-	90-92	C-	70-72

B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	Below 60

Testing Policy: We will use Mastery-Based Testing rather than Points-Based Testing. Mastery-based testing is very different from what you are used to - do not hesitate to ask me questions! You will only receive credit for answers that demonstrate you completely understand (have mastered) a topic. But you will get MANY chances to display mastery throughout the semester with NO PENALTY for earlier attempts.

- The course has been summarized by 20 topics. (Subject to change!)
- Your mastery of questions on these topics is assessed through the working of problems in mastery opportunity classes and during the final exam period.
- Each problem submitted is graded as either “Mastered” or “Not Mastered”. A grade of Mastery indicates that you have demonstrated a full understanding of the concept being tested and further work on the topic is unnecessary.
- Once you have mastered a topic, you need not attempt it again.
- There is no penalty for multiple attempts taken to achieve mastery.
- Mastery does not mean perfect! It means you understand and can demonstrate all fundamentals of the topic and are proficient at the level desired for the course you do not need to study the topic further.
- Your overall test grade is determined by the number of topics you have mastered illustrated in the table below:

# Mastered	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Mastery Grade	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25

Late Work Policy:

Video completion will be checked prior to class to ensure you have watched the video at least once! You may not get credit for watching the video after class has begun without written documentation from a college official.

Independent practice problems are uploaded to the Inquire Assignment link. This work will only be accepted by the end of class the day it is due. No late submissions will be accepted without arrangements approved prior to absence OR without written documentation from a college official. If you miss class for any reason you should submit the assignment to me the day it is due!

Accuracy Quizzes will be administered every day that graded practice is due. A student can make up the quiz if it was missed due to an excused absence. An absence is excused by notifying prior to class that you will be absent.

Subject Tutoring: Subject Tutoring is a CRLA Nationally Certified Program located on the lower level of Fintel Library in room 005. Subject Tutoring offers individual appointments in 30-minute intervals for Lab Sciences, Modern Languages, Math and CPSC, Social Sciences, Business and Economics.

Hours are Sunday - Thursday 4 p.m. - 9 p.m. For a list of tutorials or to make an appointment, go to

www.roanoke.edu/tutoring.

Special Needs: If you have a disability that may require an accommodation in this course, please let us know and provide your documentation as soon as possible. (Check with the Center for Teaching and Learning for their scheduling guidelines.)

Co-Curricular Engagement: The MCSP Department offers a series of talks (MCSP Conversation Series) that appeal to a broad range of interests related to your fields of study. You are invited to be involved with all these meetings. After attending, submit a one-page paper reflecting on the discussion through Inquire. These reflection papers earn **extra credit**, with .5% added to your course average for each attended, up to 1% total. In addition, individually you may request that other appropriate events can count. [Link to schedule](#).

Tentative Schedule and Assignments:

Use the following link:

[Course Schedule](#)

Topics:

Use the following link:

[Course Topics](#)

