Math 126: Pre-Calculus I (Section 1006) Fall 2018

Lecture Times: Tuesday/Thursday 12:00pm-1:15pm, SLH 2

Instructor: Paul Hurtado E-mail: phurtado@unr.edu
Office: DMS 220 Phone: 775-784-4655

Office Hours: Weds 3:30-4:30pm, Thur 9:45-10:45am, and by appointment

Course websites: WebCampus: wcl.unr.edu or webcampus.unr.edu or canvas.unr.edu

Instructor: http://www.pauljhurtado.com/teaching/FA18/MATH126/

TA: Sabita Sharma **E-mail:** sabita@nevada.unr.edu

TA Office: LLC 147G-3 **TA Office Hours:** 3pm-5pm Monday (see website for updates)

Required Textbook: Precalculus by Sullivan, 10th ed. Pearson (hard copy, or etext)

Pearson MyLab & Mastering: All students **must** sign up for Pearson's MyMathLab (aka My Lab and Mastering). The majority of the homework will be done online and real time access to the grade book is available as well. Online Access Codes for MyMathLab are available at the bookstore as well as online at http://www.pearsonmylabandmastering.com. A hard copy of the book is optional. All students will have access to an online version of the textbook through their access to My Lab and Mastering. Access MyLab & Mastering through WebCampus.

Calculator: A scientific calculator will be required for Exam 3 and may be useful on homework.

Course Description: Fundamentals of algebra; polynomial, rational, exponential, and logarithmic functions, their graphs, and applications; complex numbers; absolute value and quadratic inequalities; systems of equations, matrices, determinants. (Credit may not be received for MATH 126 if credit has already been awarded for MATH 128 or above). (This course satisfies the University Core Mathematics requirement).

Prerequisite: ACT score of 22, SAT score of 500, or MATH 096 with a "C" or above or an "S". *Credit may not be received for MATH 126 if credit has already been awarded for MATH 128 or above.

Core Objectives: This course satisfies the university core mathematics requirement, and meets the Core Objective CO2 Quantitative Reasoning: Students will be able to apply quantitative reasoning and mathematical analysis methodologies to understand and solve problems.

Student Learning Outcomes: Upon completion of this course, students will be able to:

- graph rational functions.
- solve equations involving exponential or logarithmic functions.
- solve inequalities involving rational functions.

Topics Covered:

Function notation, domain and range of a function

Properties of functions: increasing/deceasing, relative max/min, symmetry

Graphing functions: polynomial, rational, exponential, logarithm

Applications of functions: absolute max/min of quadratic functions

Solving polynomial and rational inequalities, Roots/zeros of polynomials

Composition of functions, Inverse functions

Applications of Exponential and Logarithmic functions

Solving systems of equations, Imaginary numbers, Circles

Grading: Your course grade will be determined by:

Homework	15%
Quizzes	10%
Exams	45%
Final Exam	30%

The grading scale will be as follows:

Α	92.0 – 100%	С	70.0 – 77.9%	
A-	90.0 - 91.9%	D+	68.0 - 69.9%	
B+	88.0 - 89.9%	D	62.0 - 67.9%	
В	82.0 - 87.9%	D-	60.0 - 61.9%	
B-	80.0 - 81.9%	F	0 - 59.9%	
C+	78 0 <i>–</i> 79 9%			

Note that you need at least a D to pass this class and earn core math credit. You need at least a C to move on to the next math class.

Required Work

Homework (15%): Homework will typically be assigned after each lecture. Homeworks covering Review Topics from Math 96 will be assigned throughout the semester. All homework assignments are to be completed on **Pearson's My Lab and Mastering.** Due dates will be posted online. It is your responsibility to keep up with the homework and due dates. You are allowed to work on homework with your classmates, a tutor, or in the math center. Getting help on homework is encouraged and is not considered cheating.

All students must register for this course on Canvas by Friday August 31: Login to our course on Canvas, Select "MyLab & Mastering" from the course menu on the left, Click on "Open MyLab & Mastering" in the middle of the page in yellow, Click "I accept" on the License Agreement.

If you already have a Pearson account, login with that now. Otherwise, click on "Create". To register for our course, you will need a valid email address and either an access code (from the bookstore) or a credit card to pay. Temporary 2 week access codes are available. If you need assistance registering, please call Pearson tech support at **1-800-677-6337**.

Quizzes (10%): There will be a total of 10 quizzes given in recitation sections on Fridays. See course schedule for details.

Exams (45%): There will be 3 exams: Sept 25 (Exam 1), Oct 23 (Exam 2), Nov 20 (Exam 3). All exams are given during lecture, and review sessions will be given in recitation before each test. You must have your UNR student ID with you for all exams.

Final Exam (30%): There will be a cumulative final exam that will be given on Monday December 17, 12:10pm – 2:10pm, in SLH 2.

Make-up Work: There will be no make-ups for exams, except for legitimate medical reasons. You must let the instructor know about the medical issue on the day of the exam. Any student participating in official University-approved activities that will interfere with an exam must make arrangements with the instructor at least two weeks prior to the exam that will be missed. UNR policies are provided in UAM 3,020 and at https://med.unr.edu/shc/insurance/clinic-policies. Any student requiring accommodations through the DRC must schedule their exams on the same day as the in class exam. No make-up quizzes are allowed. Instead, the 2 lowest quiz scores will be dropped.

Etiquette: Please be considerate of your fellow students, TA, and instructor. Please turn off all your electronics (phone, laptop, etc.) before class. Behavior that may disrupt the learning environment will not be tolerated. To clarify what counts as disruptive, please ask the instructor.

Academic Success Services: Your student fees cover usage of the Math Center (PSAC 300, www.unr.edu/mathcenter), Tutoring Center (PSAC 320, www.unr.edu/tutoring), and University Writing Center (PSAC 350, www.unr.edu/writing center). These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

Disability Services: Any student with a disability needing academic adjustments or accommodations is requested to speak with the <u>Disability Resource Center</u> (PSAC 230, www.unr.edu/drc) as soon as possible to arrange for appropriate accommodations.

Academic Misconduct: Cheating, plagiarism or otherwise obtaining grades under false pretenses constitute academic dishonesty according to the code of this university. Academic dishonesty will not be tolerated and penalties can include canceling a student's enrollment without a grade, giving an F for the course or for the assignment. The University Academic Standards Policy defines academic dishonesty, and mandates specific sanctions for violations. See the University Academic Standards policy: <u>UAM 6,502</u>, particularly Subsection C, *Levels of Academic Dishonesty*, so that you are familiar with examples of such violations, and the mandated consequences associated with the levels of academic misconduct.

Audio and Video Recording: Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may be given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.

The University of Nevada, Reno is committed to providing a safe learning and work environment for all. If you believe you have experienced discrimination, sexual harassment, sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need information related to immigration concerns, please contact the University's Equal Opportunity & Title IX office at 775-784-1547. Resources and interim measures are available to assist you. For more information, please visit: https://www.unr.edu/equal-opportunity-title-ix.

Tentative Course Schedule

See the course website for updates over the course of the semester.

	Monday	Tuesday	Wednesday	Thursday	Friday
August	27	28 Syllabus	29	30 §2.1	31 Quiz
September	3 Labor Day	4 §2.1,2.2	5	6 §2.3	7 Quiz
	10	11 §2.4	12	13 §2.5	14 Quiz
	17	18 § 3.3	19	20 §3.4	21 Review for Exam
	24	25 Exam 1	26	27 §4.1	28 Quiz
October	1	2 §4.1	3	4 §4.2	5 Quiz
	8	9 §4.2, 4.3	10	11 § 4.3	12 Quiz
	15	16 §3.5, 4.4	17	18 §4.4	19 Review for Exam
	22	23 Exam 2	24	25 § 5.1	26 Nevada Day
November	29	30 § 5.2	31	1 §5.3	2 Quiz
	5	6 § 5.4	7	8 §5.4, 5.5	9 Quiz
	12 Veteran's Day	13 § 5.6	14	15 §5.8	16 Review for Exam
	19	20 Exam 3	21	22 Thanksgiving	23 Family Day
	26	27 §1.4	28	29 Appendix A7	30 Quiz
December	3	4 § 11.1	5	6 § 11.1	7 Quiz
	10	11 Review	12 Prep Day	13	14
	17 Final Exam	18	19	20	21

- Fri. Aug 31st: Final day to add classes without instructor permission
- Th. Sept 6th: Final day to receive 100% refund for withdrawing from individual classes
- Fri. Oct 5th: Final day to withdraw from university with 50% refund
- Th. Nov 1st: Final day to drop with a 'W'