# Math 126: Pre-Calculus I (Section 1002) Spring 2019

Lecture Times: Monday/Wednesday 2:30pm-3:45pm, MHS 2

Instructor: Paul HurtadoE-mail: phurtado@unr.eduOffice: DMS 220Phone: 775-784-4655 (Please contact me through Canvas!)Office Hours: Mon11am-noon, Thur 11am-noon, and by appointment, in DMSC 220

**Course websites:** WebCampus: <u>wcl.unr.edu</u> or <u>webcampus.unr.edu</u> or <u>canvas.unr.edu</u> Instructor: <u>http://www.pauljhurtado.com/teaching/SP19/MATH126/</u>

TA: Pirouze Oliaee	E-mail: pirouzeoliaee@yahoo.com	
TA Office: EJCH 102F-2	TA Office Hours: 11am-1pm Friday	

**Required Textbook:** Precalculus by Sullivan, 10<sup>th</sup> ed. Pearson (hard copy, or etext)

**Pearson MyLab & Mastering:** All students <u>must sign up for Pearson's MyMathLab (aka My Lab and Mastering)</u>. 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 <u>http://www.pearsonmylabandmastering.com</u>. A hard copy of the book is optional. Access to an online version of the textbook comes with access to My Lab and Mastering. <u>Please only access MyLab & Mastering through WebCampus</u>.

**Calculator:** A scientific calculator (e.g., to compute logarithms) will be required for Exam 3 and may be useful on homework. Graphing calculators and cell phones are prohibited for Exam 3.

**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 already 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:

Exams 1, 2, and 3:	45%
Cumulative Final Exam	30%
Homework	15%
Quizzes	10%

The grading scale will be as follows:

А	92.0 - 100%	C+	78.0 – 79.9%	F	0 – 59.9%
A-	90.0 - 91.9%	С	70.0 – 77.9%		
B+	88.0 - 89.9%	D+	68.0 - 69.9%		
В	82.0 - 87.9%	D	62.0 - 67.9%		
B-	80.0 - 81.9%	D-	60.0 - 61.9%		

You need at least a D to pass this class and earn core math credit, and at least a C to move on to the next math class. I reserve the right to deviate from the above scale, including the assignment of +/- grades and giving higher letter grades, in borderline cases.

#### 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 January 25:

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: **Feb 15 (Exam 1), Mar 15 (Exam 2), Apr 19 (Exam 3).** All exams are given during recitation, and review sessions will be given in lecture before each exam. 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

### Wednesday May 15, <u>12:10pm – 2:10pm</u>, in MHS 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 <u>UAM 3,020</u> and at <u>https://med.unr.edu/shc/insurance/clinic-policies</u>. 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 <u>Math Center</u> (PSAC 300, <u>www.unr.edu/mathcenter</u>), <u>Tutoring Center</u> (PSAC 320, <u>www.unr.edu/tutoring</u>), and University <u>Writing Center</u> (PSAC 350, <u>www.unr.edu/writing center</u>). 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, <u>www.unr.edu/drc</u>) 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: <u>https://www.unr.edu/equal-opportunity-title-ix</u>.

## **Tentative Course Schedule**

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

	Monday	Wednesday	Friday
January	21 No Class (MLK Day)	23 Syllabus	25
	28 §2.1	30 §2.1/2.2	1 Quiz
February	4 §2.2/2.3	6 §2.5	8 Quiz
	11 §2.4	13 Review	15 EXAM 1
	18 President's Day	20 §3.3	22 Quiz
	25 §3.4	27 §4.1	1 Quiz
March	4 §4.2	6 §4.3	8 Quiz
	11 §3.5/4.4	13 Review	15 EXAM 2
SPRING	18 BREAK	20 SPRING	22 BREAK
	25 §5.1	27 §5.2	29 <b>Quiz</b>
April	1 §5.3	3 §5.4	5 Quiz
	8 §5.4	10 §5.5/5.6	12 Quiz
	15 §5.8	17 Review	19 EXAM 3
	22 §11.1	24 §11.1	26 <b>Quiz</b>
Мау	29 §Appendix A7	1 §1.4	3 Quiz
	6 Review	8 Prep Day	10
	13	15 <b>FINAL EXAM</b> 12:10–2:10pm, MHS 2	

- Mon. Jan 28: Final day to add classes without instructor permission
- Thu. Jan 31: Final day to receive 100% refund for withdrawing from individual classes Final day to add or swap classes **with** permission from the instructor
- Fri. Mar 1: Final day to withdraw from university with 50% refund
- Mon. Apr 1: Final day to drop with a 'W'