This class has mandatory online homework and a common departmental final exam. Calculators will not be allowed during the final exam. For more information on these and other policies, read this syllabus in detail and view the course information posted in the ‘Course/Final Exam Info’ section at https://faculty.unlv.edu/bellomo/CourseInfo/CourseInfo.html.

CLASS INFORMATION:
Semester and Year: Summer 2017
22 May-30 Jun

Course Number: Math 124
Course Section: 1005
Lecture Times: 1120-1250 MTWRF
Lecture Location: CBC C-317

INSTRUCTOR INFORMATION:
Name: Bob Ain
Office Location: CDC-710
Office Phone: (702) 895-5173
Email: ain@unlv.nevada.edu
Instructor Web Page: http://faculty.unlv.edu/ain
Office Hours: 0940-1040 MTWRF, or by appointment
Dept Phone: (702) 895-3567
Dept Web Page: http://www.unlv.edu/math
Other: MyMathLab course number: ain82807

COURSE DESCRIPTION:
Equations and inequalities; relations and functions; linear, quadratic, polynomial, exponential, and logarithm functions; systems of linear equations and inequalities; matrices; sequences and series; binomial theorem. 3 credits. Duplicate credits cannot be earned in any two of Math 124/126/128.

PREREQUISITES for the COURSE:
Three years of high school mathematics at the level of algebra and above and a satisfactory score on the Math Placement Test, or a minimum score of 22 on the ACT, or a minimum score of 520 on the SAT, or a C or better in Math 096 or equivalent.

COURSE MATERIALS:
Required Account: Pearson MyLab and Mastering (online account for homework)
Suggested Calculator: A non-programmable, non-graphing scientific calculator is recommended (calculator with trig functions, exponentials and logs). However calculators are not allowed on the final exam; see “calculator policy” for additional details.
SPECIAL NOTE:
During full semesters (fall and spring), students enrolled in Math 095 through Math 182 are required to attend a mandatory presentation regarding the online evaluations, tutor clinic and other tutoring options offered. Your instructor will provide you with specific details.
EVALUATION AND GRADE ASSIGNMENT:

<table>
<thead>
<tr>
<th>Weight</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td>Online Homework</td>
</tr>
<tr>
<td>10%</td>
<td>[10% for on-campus classes -or- 15% for distance education classes]</td>
</tr>
<tr>
<td>30%</td>
<td>Cumulative Final Exam (given 1120 30 Jun 2017)</td>
</tr>
<tr>
<td>42%</td>
<td>Test One, Test Two, Test Three</td>
</tr>
<tr>
<td>12%</td>
<td>Quizzes and other (offline) homework</td>
</tr>
<tr>
<td>6%</td>
<td>Portfolio</td>
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</tbody>
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* Your final exam will contain assessment questions common to all sections of this course. Formula cards and calculators are not permitted on the final exam.

Letter grades will be assigned according to the following scale: A 93-100, A- 90-92.9, B+ 87-89.9, B 83-86.9, B- 80-82.9, C+ 77-79.9, C 73-76.9, C- 70-72.9, D+ 67-69.9, D 63-66.9, D- 60-62.9, F below 60.

Extra credit will not be permitted on final grades, or the final examination.

TOPICAL OUTLINE:
Chapter R. Basic Concepts of Algebra (Sections 1-7)
Chapter 1. Graphs, Functions and Models (Sections 1-6)
Chapter 2. More on Functions (Sections 1-4)
Chapter 3. Quadratic Functions and Equations; Inequalities (1-5)
Chapter 4. Polynomial Functions and Rational Functions (Sections 1-3, 6)
Chapter 5. Exponential Functions and Log Functions (Sections 1-6)
Chapter 6. Systems of Equations and Matrices (Sections 1-3)
Chapter 7. Conic Sections (Section 4)
Chapter 8. Sequences, Series and Combinatorics (Sections 1, 7)

LEARNING OUTCOMES:
The included outcomes are only a subset of the objectives covered in the course; however, they correlate with the common set of questions embedded in the final exam.

Chapter 1
- Put a linear equation into slope-intercept form, and use this to graph the line
- Find the equation of a line given two points
- Identify domain restrictions of square root functions
- Identify domain restrictions of rational functions
- Identify domain restrictions of the composition of square root and/or rational functions
- Find the equation of a line that is parallel/perpendicular to another through a given point

Chapter 2
- Be able to evaluate a piecewise function for given inputs
- Find the composition of two or more functions, along with its domain
- Identify when a given function is even, odd or neither

Chapter 3
- Rewrite a given formula, solving for a specific variable
- Define and use the quadratic formula to find the roots of a quadratic equation
- Solve equations that are (or easily become) quadratic in form
- Determine the characteristics of the graph of a quadratic (direction of opening, axis of symmetry, vertex, roots, y intercept)
- Solve linear absolute value inequalities
• Solve rational equations
• Solve radical equations

Chapter 4
• Determine what happens to a given polynomial as the independent variable tends to positive
  and/or negative infinity
• Use synthetic division to find the result of a polynomial divided by \( x-c \)
• Solve a polynomial inequality
• Solve a rational inequality

Chapter 5
• Find the inverse of a given function or relation
• Solve exponential equations with different bases by utilizing logs
• Solve log equations by first having to combine logs, then change to exponential form
• Find half life or doubling time given context of model
• Given equation, find half life or doubling time

Chapter 6
• Solve a system of two linear equations with two unknowns
• Convert between a linear system and its matrix form

Chapter 7
• Solve a nonlinear system using elimination method

Chapter 8
• Write the terms of a recursive sequence given as a formula

SAMPLE PROBLEMS/EXAM HINTS:
A topical outline can be found online
(https://faculty.unlv.edu/bellomo/CourseInfo/CourseInfo.html). This includes hints for the final
exam. You are strongly encouraged to review this handout.

COURSE SCHEDULE:
See Assignment Summary.

CLASS POLICIES:
ATTENDANCE:
Attendance is a mandatory component of all on-campus classes, and will be taken daily. Be in class
and be on time.

CALCULATOR/TECHNOLOGY:
Calculators will not be permitted on the final exam. Calculators will be needed for some parts of
the course, and allowed for classwork and other evaluations, but will not be emphasized. The
primary focus of this course is to be able to think well. At no time during classroom instruction or
assessments may you use cell phones, laptops, ipods (or similar such devices), nor are you
permitted to share a device with another student.

ACADEMIC INTEGRITY:
Academic integrity is a legitimate concern for every member of the campus community; all share in
upholding the fundamental values of honesty, trust, respect, fairness, responsibility and
professionalism. By choosing to join the UNLV community, students accept the expectations of the
Academic Misconduct Policy and are encouraged when faced with choices to always take the
ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner
compatible with UNLV’s function as an educational institution. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: http://studentconduct.unlv.edu/misconduct/policy.html

While the UNLV Department of Mathematical Sciences encourages students to collaborate with peers, there is a distinction between verbal collaboration and copying. Specifically – it is not acceptable to “divide” work, and it is not acceptable to use another persons’ hard work (current or former student, teaching assistant, or tutor) as your own. Further, if you feel you are being misguided, it is your responsibility to report this to your instructor before testing, so they can correct the situation and give you proper clarification.

Academic dishonesty will not be tolerated; the College of Sciences emphasizes zero tolerance for academic dishonesty. All acts of academic dishonesty may result in: automatic zero on the assignment, F in the course, disciplinary review, revoking of degree, probation, expulsion, etc.

HOMEWORK:
Homework will be assigned and graded using Pearson MyLab and Mastering (online account). The necessary account information is included with new textbooks. Students who purchase used textbooks may purchase an access code at http://www.pearsonmylabandmastering.com/. The Course ID for this course is ain82807. Offline homework assignments are due as indicated on the Assignment Summary. Other homework will be assigned, always with adequate time between assignment and due date.

MAKE-UP POLICY:
Late work is not generally accepted; if it is, expect a points penalty. Make-up exams may or may not be given at the discretion of the instructor.

TESTING:
Test days you will arrive on time, and minimize the amount of clutter you bring into the classroom. Leave all electronic devices in your home or automobile; if it is necessary to carry them for emergency purposes, they should be turned OFF before the assessment begins. If you create a disturbance with an electronic item (even in vibrate mode) you may receive a zero on that assessment. Bring a photo id to all tests (especially the final exam), you may be asked to provide proof of identification. Formula cards and calculators are not permitted on the final exam. Test dates are: Test One, 30 May. Test Two, 13 Jun. Test Three, 22 Jun. Final exam, 30 Jun.

TUTORING:
Tutoring through the Department of Mathematical Sciences is available for this course – this includes Coaching Labs and Course Specific Labs held in CBC-C323, and a walk in tutoring clinic held in CDC-7. For more information including location and hours please call (702) 895-3567 or email math@unlv.edu. Additional free and pay tutoring is available in the Academic Success Center, http://academicsuccess.unlv.edu/tutoring. Students are highly encouraged to exploit the opportunities afforded by these tutoring programs.

UNIVERSITY POLICIES:
(1) The Disability Resource Center (DRC) determines accommodations that are “reasonable” in promoting the equal access of a student reporting a disability to the general UNLV learning experience. In so doing, the DRC also balances instructor and departmental interests in maintaining curricular standards so as to best achieve a fair evaluation standard amongst students.
being assisted. In order for the DRC to be effective it must be considered in the dialog between the faculty and the student who is requesting accommodations. For this reason faculty should only provide students course adjustment after having received this “Academic Accommodation Plan.” If faculty members have any questions regarding the DRC, they should call a DRC counselor.

UNLV complies with the provisions set forth in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. The DRC is located in the Student Services Complex (SSC-A), Room 143, phone (702) 895-0866, fax (702) 895-0651. For additional information, please visit: http://drc.unlv.edu/.

(2) Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the last day of late registration of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. This policy shall not apply in the event that administering the test or examination at an alternate time would impose an undue hardship on the instructor or the university which could have been avoided. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=4&navoid=164.

(3) The University requires all members of the University Community to familiarize themselves and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: http://www.unlv.edu/committees/copyright/.

(4) By policy, faculty and staff should e-mail students’ Rebelmail accounts only. Rebelmail is UNLV’s Official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students’ e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu.

(5) One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance.

Appointments may be made in person or by calling 895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: http://writingcenter.unlv.edu/.

(6) The grade of I (Incomplete) can be granted when a student has satisfactorily completed all course work up to the withdrawal date of that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. A student who receives an I is responsible for making up whatever work was lacking at the end of the semester. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

GUIDELINES FOR COURTESY AND RESPECT:
I would like to welcome all students into an environment that creates a sense of community pride, courtesy, and respect; we are here to work cooperatively and to learn together.

In order to create a smooth and harmonious learning community, please make every attempt to come to all the class sessions, to come to class on time, and to stay until the end of the meeting. There may be a time when you are unavoidably late for class. In that case, please come into the room quietly and choose a seat closest to the entrance. Once the class session has begun, please do not leave the room and then re-enter unless it is an emergency.

It is important that we are all able to stay focused on the class lecture/discussion. For this reason, only one person at a time in the class should be speaking. Side conversations are distracting for surrounding students and for the professor. All electronic devices should be turned off BEFORE entering the room. You must have instructor permission for use of a laptop, and it is only to be used for instructional purposes.

As you can see, simple norms of courtesy should be sufficient to have our class run in the best interests of all. Any student considered to be a distraction to the learning environment may be asked to leave the classroom at any time. Any student who is continually a distraction to the learning environment may be administratively dropped. Thank you in advance for your cooperation.

**OTHER INSTRUCTOR POLICIES:**

Bring your textbook to class every day. A positive attitude is expected in this class every day.

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