Course Syllabus for

Math 121
College Algebra

Fall 2013, 3 credits
Department of Mathematics

Instructor: Amy Ellis
August 26, 2013 – December 13, 2013
Fall 2013 Semester

Course Description: This course helps prepare students for the three-semester calculus sequence and two-semester general chemistry sequence. The topics considered crucial include polynomials, rational expressions, linear and quadratic equations, and functions.

Prerequisites: This course recommended for students who have completed MATH 120 or Math ACT score of 21 or higher (Math SAT of 540 or higher).

Instructor Information:

Name: Amy Ellis

Office: Clay Tower Building 616

E-mail Address: amyellis@ucwv.edu If you send me an e-mail regarding class, please remember to tell me which class (Math 121 or Math 116) and which section you are taking.

Office Phone: 304.357.4386

Cell Phone: 304.389.3922 Feel free to text me with questions or issues.

Office Hours: Monday, Wednesday and Friday from 8:00 am to 10:00 am, 12:00 pm to 1:00 pm and 2:00 pm to 2:30 pm and Tuesday and Thursday from 9:15 am to 12:15 pm and 1:40 pm to 2:30 pm

Required Course Materials and Technology:

Textbook: *College Algebra*, 6th Ed, Robert Blitzer,
ISBN-10: **0321782283,**
ISBN-13: **978-0321782281**

Calculator: A calculator can be used for tests and quizzes.

Expected Course Learning Outcomes for Math 121:

Upon successful completion of the course the student will be able to:

1. Demonstrate knowledge of the fundamental concepts, symbols, language, and principles of mathematics.

2. Perform appropriate numerical calculations or algebraic manipulations of linear equations and draw conclusions from the results.
3. Manipulate mathematical formulas and solve for the desired variable.
4. Solve "word" problems that require mathematical analysis and quantitative reasoning.
5. Perform the appropriate algebraic manipulations on polynomial and rational expressions.
6. Graph and discuss polynomial and rational functions.

Expected Praxis Outcomes for Math 121:

This course will satisfy the following Praxis outcomes:

- Rational numbers
- Problem-solving

Expected University Liberal Learning Outcomes:

This course will satisfy the following University Liberal Learning Outcomes:

Science:

6.2 The graduate demonstrates Quantitative Literacy.

6.2.01 Demonstrates competent use of algebraic and geometric language correctly and efficiently.

6.2.02 Demonstrates the ability to manipulate linear equations and mathematical formulas for appropriate values.

6.2.03 Demonstrates the ability to solve "word" problems that require mathematical analysis.

Outcome	Assignment Specifically Addressing Outcome		
6.2.01	P.1	Algebraic Expressions & Real Numbers	1-18, 43-74, 85-96, 103-110, 111-120
	P.4	Polynomials	1-79 (odds)
	1.2	Linear Equations and Rational Equations	1-50 (odds)
	2.1	Basic Functions and Their Graphs	1-10, 27-33
	2.8	Distance and Midpoint Formulas; Circles	1-15, 19-25, 31-40, 41-50, 53-58, 65-66
6.2.02	1.2	Linear Equations and Rational Equations	1-50 (odds)
	2.3	Linear Functions and Slope	1-10, 11-38 (odds), 39-58, 59-65, 67-70, 73-76
	2.4	More on Slope	5-8, 9-12, 19-24
	2.8	Distance and Midpoint Formulas; Circles	1-15, 19-25, 31-40, 41-50, 53-58, 65-66
6.2.03	1.3	Models and Applications	1-10, 28, 30, 33-36, 43-45, 48, 49, 55-65
	2.3	Linear Functions and Slope	1-10, 11-38 (odds), 39-58, 59-65, 67-70, 73-76
	2.4	More on Slope	5-8, 9-12, 19-24

Critical Thinking – the process of reflection, reasoning and imagining, through which the individual willingly, systematically, and habitually examines and explores statements, problems, issues, beliefs, and social constraints. The graduate demonstrates these competencies at each level: (1) an attitude of intellectual inquiry; (2) information literacy; and (3) critical, analytical, and reflective thinking skills [metacognition].

Critical thinking skills are an integral part of any mathematics course. In this course, all three types of assignments will measure critical thinking skills. The problems on the quizzes and tests are meant to assess not only the students' ability to correctly work varying types of mathematical problems, but also help the students develop their critical thinking skills. The writing assignment is designed to measure the students' capacity for metacognition, or thinking about thinking.

This class has been granted a mid-level critical thinking icon (4.2) by the Critical Thinking Roundtable.

Alignment of Course Learning Outcomes with Course Content:
The following chart shows the relationship between the topics that will be covered during the semester and the course learning outcomes that will be addressed by those topics.

Content	Outcomes							
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Algebraic Expressions	X							
Equations and Inequalities	X	X	X	X	X			
Relations, Functions and Graphs	X		X	X		X	X	
Polynomials and Rational Functions	X		X	X		X	X	
Systems of Equations	X	X		X				X
Analytic Geometry	X		X	X		X	X	
Further Topics in Algebra	X		X	X				X

Classroom Procedures

Attendance
Attendance is EXPECTED and is necessary for obtaining the skills to successfully complete this course. Attendance will be taken at the very beginning of class for recordkeeping purposes. If you arrive late, it is *your responsibility* to let the instructor know that you were present for that class so you will not be counted as absent. The Department of Natural Science and Mathematics attendance policy (that encompasses the University of Charleston attendance policy set forth in the 2012-2013 academic catalog, page 61). If there are an unusual amount of unexcused absences, the instructor reserves the right to lower the student's grade in the class by one or more letters.

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The Department of Natural Science and Mathematics abides by the attendance policy set forth by the University of Charleston. Said policy is published in the academic catalog. Instructors have the option of allowing excused absences for reasons not outlined in the catalog. Please note that

having a job and working is not a valid excuse for missing class. Exact policies may vary from instructor to instructor and such policies will be documented in the course syllabus (see Attendance above).

Excused Absences

- The student will be solely responsible for securing any materials or assignments given out for the missed class. Any assignments due on that day must be turned in on or before returning to class. Instructors have the option to deduct points from any assignments not turned-in in a timely fashion. Such policy will appear in the syllabus
- ***If a student is going to be absent on a test day, the student must notify the instructor on or before the day of the test. Any test missed must be completed within one week of returning to class.*** It will be the student's responsibility to make arrangements to take the make-up examination. Make-up examinations may consist of questions that differ from those questions on the test given in class. The student will be solely responsible for securing any materials or assignments given out for the missed class. Any assignments due on that day must be turned in prior to returning to class. Instructors may deduct points for assignments not turned-in in a timely fashion.

Unexcused Absences

- The student will be solely responsible for securing any materials or assignments given out for the missed class. Any assignments due on that day must be turned in prior to returning to class. Instructors may deduct points for assignments not turned-in in a timely fashion. Instructors have the option to fail students for too many unexcused absences from the class.
- Missing a test for an unexcused absence will not be tolerated. **Students will be allowed to make-up one missed test for an unexcused absence with a 10% reduction in grade**. Students will not be allowed to make up subsequent missed tests for unexcused absences. A grade of 0 will be recorded for those tests.
- Also, any attempt to falsify records by either signing in another student or going back in the record to sign in for a missed class is considered a breech of academic integrity. Any students involved in falsifying records will automatically fail the course.

Assessment of Student Achievement:

All students will be assessed by their ability to meet the learning outcomes. This assessment will occur through a combination of homework activities, chapter tests, writing assignments and quizzes.

Note: ***Critical thinking skills are an integral part of any mathematics course. In this course, all types of assignments will measure critical thinking skills. The homework problems, problems on the tests, and the writing assignments are meant to assess not only the students' ability to correctly work varying types of mathematics problems, but also to help the students develop and use their critical thinking skills.***

Chapter Tests/Final Examination

Chapter tests will be given at the end of each of each chapter covered during the five week summer session. Throughout the time that the material for each chapter is being covered, quizzes may also be given for the various sections. These quizzes and chapter exams may or may not be open notes/open book depending upon the material covered. The number of points that each test and or quiz will be worth will depend on the amount of material covered. Tests

and quizzes will consist of problems to be worked that are similar to those assigned for homework.

Testing Procedures

The faculty of the Department of Natural Science and Mathematics is committed to maintaining educational integrity in the classroom. Therefore:

1. Students are only permitted to have a pen or pencil and when applicable an approved calculator on the desktop during an exam.
2. Students may not have drink bottles during an exam.
3. Students may not wear caps, hoodies, or other headwear during a test.
4. Books, book bags, and notes must be stored in an area designated by the instructor prior to the start of the exam.
5. Cell phones must be turned off during the test and stored in the designated area.
6. Students may not have I-pods or MP3 players on their person during the test.
7. Students may not use calculator wristwatches during a test.
8. Students are encouraged to read the University of Charleston policy on integrity.
9. Each instructor in the Department of Natural Science and Mathematics reserves the right to have additional policies to maintain integrity in the classroom.

Homework

Homework problems from the textbook will be assigned for each section covered throughout the course. Please note that problems appearing on chapter tests and quizzes will be very similar to those assigned for homework, therefore, it is in your best interest to complete the homework assignments and ask questions if necessary. Homework may be gone over in class each day and some problems will be completed in class.

Writing Assignment

There will be one writing assignment in this course. Every student will write about one problem, chosen by the instructor, which was worked incorrectly. This assignment is designed to help the instructor assess your critical thinking skills. ***In order to effectively complete this assignment, you must be able to think metagcognatively. Simply put this means thinking about your thinking***. This writing assignment should explain how you approached the solution to the problem and ultimately, the correct way to solve the problem. As part of this writing assignment, you should address what went wrong in your thinking process during the initial attempt at solving the problem being very detailed in the explanation. As with any writing assignment, this writing assignment needs to be carefully thought out and contain an introduction, a body and a closing. Correct grammar and spelling are expected. The assignment will be typed and uploaded to Chalk & Wire. This assignment will be worth 30 points and will be graded using the Critical Thinking Rubric, Quantitative Literacy Rubric and Commination Writing Rubrics.

Plagiarism from the textbook or any other source is not acceptable and will be assessed at zero (0) points. Also, as part of this assignment, if you would like to work the problem correctly on a separate sheet of paper, the points missed on that problem will be given back as extra credit. No extra credit points will be given if the writing assignment is assessed and given a score of zero.

Classroom Behavior

- There is to be absolutely no "chit-chatting" during lectures (i.e., whispering or talking) Also, notes are not to be written and passed back and forth during class time.
- There is to be no sleeping or putting your head on the desk.
- Music players of any type (including I-pods) are not allowed during class time.
- No talking on or playing with cell phones.
- No text messaging on cell phones or laptop computers during class. Laptop computers are not to be used during class time.

Your full attention should be on the class and the lecture. If you feel that you know all of the information being explained, then it should be a good review for you and that is no excuse to disrupt the rest of the class. Anyone exhibiting disruptive classroom behavior will be asked to leave the class and will not be allowed to return without a note from an athletic coach or academic advisor.

Student Responsibilities

This is a college-level mathematics class and as such, you have certain responsibilities to fulfill if you hope to complete this course successfully. You are the primary learner and must take responsibility for making learning happen. As such, you are expected tComplete all homework assignments if you feel you need to.

- Come to class prepared with pencil, paper, textbook, calculator, etc. ***Note** If you come to class to take a test without a writing instrument, you will be asked to leave.*
- Ask questions when you do not understand something and seek help as soon as you realize that you do not understand something.

Tentative Grading Scale**

Points from the three assessment areas will be accumulated and letter grades will be assigned according to the following scale:

Activity**	Points Possible	Total Points Possible
Quizzes (Number Given x points)	Depending	Quizzes x points
Chapter Tests (Number x points)	Depending	Tests x points
Writing Assignment/Reflection Activity	30	30
Homework/Class Participation	100	100
Tentative Total		***130 + Quizzes + Chapter Test***

**Please note that the grading scale is tentative and will be based on the actual number of quizzes that are given to the class. This scale will be updated and posted to eLearn to reflect actual assignments/tests as the semester continues.

Letter grades on the above-mentioned activities will be assigned using the following scale:

A 90 – 100%
B 80 – 89%
C 70 – 79%
D 60 – 69%
F 0 – 59%

When final grades are calculated, percentages are rounded up if your attendance in class has been at least 95% of the time. If you have not been present for 95% of the times we have had class, then your final grade percentage will not be rounded up. For example, if your final percentage is 89.69 and you have only missed two classes, then that would round to be a 90%, or an A. If you had the same percentage and have missed 13 classes, that percentage would remain a 89.69% and your final grade would be a B.

Extra Credit

Opportunities for extra credit will be provided throughout the semester. It is the responsibility of the student to take advantage of the extra credit opportunity at the time it is given. Extra credit will be given at the discretion of the instructor.

Resources

- ELearn: Class information such as the syllabus, any assignments, extra credit and other information can be found on the eLearn site for this class. Grades will also be kept on eLearn, so if you have a question regarding one of your grades, check there first.

- Learning Commons located on the third floor of the Library, which is located in Clay Tower. This will be home to the following academic services:

  The Academic Success Center provides tutoring in writing, speaking, and discipline-specific areas using professional staff and trained student tutors.

  Help is available by appointment by calling 304-357-4776 or stopping by the main desk on the 2nd floor of the Schoenbaum Library.

  Services provided include:

  Peer Tutoring

  - **Discipline-specific Tutoring:** Peer tutoring is available in a variety of subjects including writing, math, science, economics, accounting, nursing and radiology. Tutors can also assist with study skills and test-taking strategies.
  - **Writing Tutoring:** For students who need tutoring specifically in writing, peer tutors are available to help generate, organize, and develop ideas for papers. Tutors can also explain punctuation and grammar, as well as teach students how to proofread, document secondary sources, and address a host of other writing-related issues. Additionally, tutors are trained to assist students with the Comm 101 and 102 portfolios. Our goal is to provide quality assistance, tools, and resources to help students become confident, independent writers.

  Online Tutoring

  All UC students now have access to the Smarthinking online tutoring tool.

  Online tutoring is provided in the following formats:

  - **Live, On-Demand Tutoring**
    Using an advanced queuing system, students are connected on-demand with an expert educator. Students work one-on-one, in real-time with a tutor, using a virtual whiteboard technology.
  - **Online Writing Lab**
    Students can submit a paragraph or essay for individualized critique by expert writing tutors.

Students complete a form that provides the tutor with information on the writing assignment and requested areas of assistance, then receive the help that they need with the writing assignment. Students can also request a review by an ESL (English as a second language), technical writing or creative writing expert when appropriate. Upon completion, students are notified that their review is available. Students receive feedback outlining the strengths, areas in need of improvement, and specific guidance to help them improve the quality and content of their writing.

- **Submit a Question**
  Students who do not need instant feedback can choose to submit an asynchronous question. Using the virtual whiteboard technology, students submit their question to a tutor and the student is notified when their comprehensive response is available.
- **Schedule an Appointment**
  - Students who prefer to plan ahead can schedule a 30-minute appointment with a tutor of their choice. At the scheduled time, the student and tutor connect live using the virtual whiteboard technology.
  - Disability Services which documents and tracks students with disabilities
  - Career Development Services that will assist with internships and provides career advice.

University of Charleston Policies and Statements

Academic Integrity

For a community of learners to thrive, all members must engage in the educational process with honesty and integrity. The University of Charleston community holds firmly to the belief that all members of the community are responsible for promoting and protecting academic integrity. Cheating, plagiarism, fabrication, or facilitating academic dishonesty will not be tolerated.

It should be noted that a hearing involving academic dishonesty – discussed below – is an academic matter, and not a criminal or civil legal proceeding. Rather, it is a process unique to the community of scholars that comprise a university. It is designed to protect the rights of the students accused of violating integrity standards, to educate students, and to deter further violations. Faculty members may use evidence and their professional judgment to determine whether a student has violated academic integrity. The expectation is to follow the rules of "preponderance of evidence" rather than "evidence beyond a reasonable doubt" in the process described below.

The University of Charleston believes that students learn and develop greater knowledge of academic integrity as part of our educational process. The Academic Integrity process is designed to facilitate a student's development of this understanding while requiring accountability for violation of the policy. The following is an outline of the levels of academic integrity infractions and sanctions:

Academic Dishonesty Levels

1) Minor Infraction
   a. Examples include but are not limited to:
      i. Repetitive improperly formatted citations
      ii. Omission of reference(s)
      iii. Partial paraphrase, makes an attempt but lacks understanding
   b. Consequences
      i. First infraction-training
      ii. Second infraction-Failure of assignment or exam
      iii. Third and all subsequent minor infractions - See section 2-c-i
2) Standard Academic Violations

a. Cheating, Plagiarism, fabrication, facilitating academic dishonesty
b. Examples include but are not limited to:
    i. Methodical omission of sources
    ii. Cut and paste w/o proper citation
    iii. Cheating on exam
    iv. Giving away answers
    v. False insertion of citation
    vi. Third minor infraction
c. Consequences
    i. First infraction (or third minor infraction) - Failure of course with dishonor (FX). A student can repeat the course but the grade will remain on the student's transcript and will be calculated in their GPA.
    ii. Second infraction - See section 3-c-i

3) Egregious Academic Violations
    a. Above and beyond standard academic violations
    b. Examples include but are not limited to:
        i. Second standard academic violation
        ii. Providing exams or class work for the purpose of cheating
        iii. Stealing/copying exams
        iv. Impersonating another student
        v. Buying work from another student or source and using as own
        vi. Widespread collusion of student violators
    c. Consequences
        i. Failure of course with dishonor (FX) and expulsion from the university

Procedure

If a faculty member has reason to believe that a student may have committed a violation of the Academic Integrity Policy, the faculty member will conduct an investigation to confirm or deny the violation. If the violation is confirmed then the faculty must make a reasonable effort to notify the student within two business days. The faculty member should schedule a meeting with the student within two business days of the notification.

When the student meets with the faculty member, the student should be presented with the evidence of the violation, told the level of infraction and the sanction for that infraction. The faculty member should also inform the student of his/her right to appeal the decision. If the student should choose to appeal, he/she should notify the Dean of the instructor's school in writing within two business days of the meeting. If the student does not appeal within two business days, the decision will be upheld and the infraction/sanction will be recorded.

Appeal Process

During an appeal process, the student should continue to attend class until a decision is rendered. The Academic Integrity Review Board will oversee the appeal hearings for all undergraduate and graduate students. The board will be made up of eight faculty members; two faculty from the School of Business, two from the School of Pharmacy, two from the School of Health Sciences and two from the School of Arts and Sciences. The members will be appointed by the Dean of each school.

If the student notifies the Dean of his/her intent to appeal, the Dean will notify the Chair of the Academic Integrity Review Board. Within two business days of receipt of the appeal, the chair of the Academic Integrity Review Board or his/her designee will send a letter to the student to inform him/her of the date of the appeal hearing.

If the violation is a minor infraction, one person from the committee will meet with the student, review the appeal and decide whether or not to uphold the faculty member's decision or to reverse the decision. The student will be notified of the decision by the chair of the Academic Integrity Board or his/her designee. If the decision is upheld, the infraction/sanction will be recorded into the student's record. If the decision is reversed, the student's record will reflect the reversal.

If the violation is a standard infraction, three people from the committee will review the appeal and decide whether or not to uphold the faculty member's decision or to reverse the decision. The committee's decision will be based upon a two-thirds majority. The student will be notified of the decision by the chair of the Academic Review Board or his/her designee. If the decision is upheld, the infraction will be recorded and the student will receive an "FX" in the course. If the decision is reversed, the student's record will reflect the reversal.

If the violation is an egregious infraction, the entire committee will review the appeal and decide whether or not to uphold the faculty member's decision or to reverse the decision. The committee's decision will be based upon a two-thirds majority. The student will be notified of the decision by the chair of the Academic Review Board or his/her designee. If the decision is upheld, the infraction will be recorded, the student will receive an "FX" in the course and the student will be expelled from the university. If the decision is reversed, the student's record will reflect the reversal.

Note on timing: It is recognized that there may be times that, due to illness, travel, scheduled breaks, etc., the precise schedules indicated in the preceding paragraphs may not be achievable. In such cases, all participants must make good faith efforts to come as close to the schedules as possible. Hearings for alleged integrity violations that occur at the end of the spring semester present special challenges. For returning students, the schedule in the preceding paragraphs will remain in effect. Students suspected of violating academic integrity must work with faculty to attempt to resolve the integrity issue within two weeks of the last official day of the semester or wait until the beginning of the following semester to seek resolution. For a graduating senior suspected of violating academic integrity, he/she may walk at graduation if all other academic requirements have been met, but he/she will not receive a diploma until the integrity matter has been resolved.

Policy for Students with Disabilities

It is the policy of the University of Charleston to provide reasonable accommodations for qualified individuals with documented disabilities. This college will adhere to all applicable federal, state, and local laws, regulations and guidelines with respect to providing reasonable accommodations as regards to affording equal educational opportunity. It is the student's responsibility to contact the disability coordinator and provide current documentation from appropriate credentialed persons. The disability coordinator is located in room 302 of the Learning Commons (3rd floor of Clay Tower Building) and will assist students and faculty in arranging appropriate accommodations. This is in accordance with Section 503 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

University of Charleston Mathematics Assessment Rubrics

Level 4

Shows complete understanding of a problem's mathematical concepts and procedures
Indicates a logically sound strategy that leads to a correct solution
Performs algorithms completely and correctly
Identifies all relevant information and ignores irrelevant information
Uses appropriate mathematical notation and precise mathematical language
Shows clear evidence of a complete and systematic solution process that leads to a correct answer
Checks for reasonableness of result

Level 3

Shows a nearly complete understanding of a problem's mathematical concepts and procedures
Indicates a logically sound strategy that may be incomplete or underdeveloped
Performs algorithms completely but computations may contain minor errors
Identifies most relevant information but sometimes does not ignore irrelevant information
Uses appropriate mathematical notation and precise mathematical language
Shows some evidence of a systematic solution process but some minor error is made
Checks for reasonableness of result

Level 2

Shows some understanding of a problem's mathematical concepts and procedures
Indicates little or no strategy for problem solving
Performs algorithms that contain major computational errors
Identifies some relevant information but shows limited understanding of its importance
Seldom uses appropriate mathematical notation and frequently uses imprecise mathematical language
Shows little evidence of a systematic solution containing conceptual errors
Does not check for reasonableness of result

Level 1

Shows little or no understanding of a problem's mathematical concepts and procedures
Selects an inappropriate strategy for solving the problem
Performs algorithms that contain major computational errors
Identifies little or no relevant information
Consistently misuses or omits appropriate mathematical notation
Shows no evidence of a systematic solution process and reaches an impasse early
Does not check for reasonableness of result

Level 0

No answer attempted
No apparent strategy
Response completely incorrect, irrelevant, or meaningless

Math 121 Tentative Schedule Fall 2013

Date	Section	Concept	Assigned Homework Problems
8-26	Intro	Syllabus Review, Introduction	Review Syllabus
8-28	P.1	Algebraic Expressions, Mathematical Models and Real Numbers	1-18, 43-74, 85-96, 103-110, 111-120
8-30	P.2	Exponents and Scientific Notation	1-64
9-2	P.2	Exponents and Scientific Notation	1-64
9-4	P.3	Radicals and Rational Notation	1-100
9-6	P.3	Radicals and Rational Notation	1-100
9-9		**Review**	Page 89: 1-3, 9-22, 24-31, 41-72
9-11		**Test- Sections P.1 – P.3**	
9-13	P.4	Polynomials	1-79 (odds)
9-16	P.5	Factoring Polynomials	1-55 (odds); 65-75, 117-120
9-18	P.5	Factoring Polynomials	1-55 (odds); 65-75, 117-120
9-20	P.6	Rational Expressions	1-65 (odds
9-23	P.6	Rational Expressions	1-65 (odds)
9-25		**Review**	Page 91: 73-88, 89-95, 109-119
9-27		**Test- Sections p.4 – P.6**	
9-30	1.1	Graphs and Graphing Utilities	1-20, 41-46
10-2	1.2	Linear Equations & Rational Equations	1-50 (odds)
10-4	1.2	Linear & Rational Equations	1-50 (odds)
10-7	1.3	Models and Applications	1-10, 28, 30, 33-36, 43-45, 48, 49, 55-65
10-9	1.4	Complex Numbers	1-43
10-11	1.4	Complex Numbers	1-43
10-14	1.5	Quadratic Equations	1-107 (odds), 140-150
10-16	1.5	Quadratic Equations	1-107 (odds), 140-150
10-17 and 10-18		**Fall Break**	
10-21	1.7	Linear & Absolute Value Inequalities	1-11, 15-20, 27-35, 41, 43, 51-58, 59-67
10-23		**Review**	
10-25		**Test- Sections in Chapter 1**	Page 202: 1-3, 15-33, 39, 43, 45, 47, 48-55, 58-80, 105-121 (odd)
10-28	2.1	Basic Functions and Their Graphs	1-10, 27-33
10-30	2.3	Linear Functions and Slope	1-10, 11-38 (odds), 39-48, 49-58, 59-65, 67-70, 73-76
11-1	2.3	Linear Functions and Slope	1-10, 11-38 (odds), 39-48, 49-58, 59-65, 67-70, 73-76
11-4	2.4	More on Slope	5-8, 9-12, 19-24
11-6	2.6	Combinations of Functions; Composite Functions	1-10, 31-40, 51-53, 65, 67-69
11-8	2.7	Inverse Functions	1-5
11-11	2.8	Distance & Midpoint Formulas; Circles	1-15, 19-25, 31-40, 41-50, 53-58, 65-66
11-13	2.8	Distance & Midpoint Formulas; Circles	1-15, 19-25, 31-40, 41-50, 53-58, 65-66
11-15		**Review**	Page 323: 1-3, 7-9, 11-16, 31-44, 70-74, 76-78-82, 85-86, 97-103
11-18		**Test- Sections in Chapter 2**	
11-20	3.3	Division of Polynomials	1-10, 17-25, 33-36
11-22	3.3	Division of Polynomials	1-10, 17-25, 33-36
11-25	3.4	Zeros of a Polynomial Function	1-5, 9-10, 33-3439-40
11-27 to 11-29		***Thanksgiving Break***	
12-2	4.1	Exponential Function	1-10, 53-56
12-4	4.2	Logarithmic Functions	1-40, 81-100
12-6		Review	Page 435: 27-31, 35-36, 40 Page 510: 10-11, 13-29
12-8		**Review Sections 3.3, 3.4. 4.1 and 4.2**	
12-9 to 12-13		***Final Exam Week***	

Critical Thinking Rubric

Foundational-4.1/Mid-level-4.2/Advanced-

Competency	Insufficient (1)	Emerging (2)	Acceptable (3)	Proficient (4)	Exemplary (5)	Score 1-5
Attitude: The graduate demonstrates an attitude of intellectual inquiry	■ Disregards facts ■ Demonstrates lack of interest in assignment ■ Uses no sources	■ Uses facts only to support own perspective ■ Demonstrates intellectual curiosity to only a portion of assignment ■ Uses sources indiscriminately	■ Seeks objective, substantiated facts ■ Demonstrates intellectual curiosity throughout assignment ■ Applies most information/sources appropriately	■ Identifies and supports facts ■ Identifies related issues ■ All information/sources used are appropriate to the assignment	■ Considers facts related to different perspectives ■ Student goes beyond assignment topic to explore related issues ■ Optimally applies information/sources to assignment	
Process: The graduate demonstrates information literacy	■ Lacks awareness of information needed ■ Accepts information sources indiscriminately ■ Fails to recognize implications of information ■ Uses information unethically	■ Gathers some related information, but includes irrelevant information as well ■ Sporadically evaluates sources and aspects of sources ■ Partially recognizes implications of information ■ Uses information ethically	■ Determines the extent of information needed ■ Evaluates information/sources critically ■ Identifies implications of information ■ Uses information ethically	■ Identifies main issues and most subordinate and related issues ■ Applies all information and sources critically ■ Addresses most implications of information ■ Uses information ethically	■ Identifies main issues and all subordinate and related issues ■ Integrates appropriate sources and relevant information ■ Addresses all relevant implications of information ■ Uses information ethically	
Metacognition: The graduate demonstrates critical, analytical, and reflective thinking skills	■ No consideration of thought processes ■ Does not identify reason behind specific thought processes ■ No reflection evident	■ Incomplete identification of thought processes ■ Identifies incorrect or faulty reasoning behind thought processes ■ Incomplete or incorrect reflection to improve thought processes	■ Identifies own thought processes ■ Identifies rationale behind specific thought processes ■ Reflects on how to improve thought processes	■ Applies self-examination of processes ■ Considers reasoning behind thought processes ■ Considers specific options to improve thought processes	■ Integrates self-examination throughout process ■ Analyzes reason behind specific thought processes ■ Develops improvement plan for thought processes	

Student:	Course:	Assignment:	Faculty:	Date:	Total Score:

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Writing Rubric

Communication Competency 2.1 / Writing

Criteria	Insufficient (1)	Emerging (2)	Acceptable (3)	Proficient (4)	Exemplary (5)	Score 1 - 5
Demonstrates comprehension of focus and purpose.	■ Purpose is confused ■ Almost no attention to audience ■ Assignment not addressed	■ Purpose is evident but may not be consistent (e.g., switching between informing, persuading, entertaining, etc.) ■ Some attempt to address the assignment, but may be inconsistent ■ May shift topic, focus, point of view (e.g., shifts from 3rd person [he, she] to 2nd person [you])	■ Maintains clear purpose most of the time ■ Demonstrates awareness of audience most of the time ■ Addresses assignment	■ Maintains clear purpose ■ Demonstrates effective awareness of audience ■ Remains on topic ■ Addresses assignment thoughtfully	■ Maintains strong purpose (e.g., inform, persuade, entertain, etc.) ■ Demonstrates keen awareness of audience ■ Strong sense of topic ■ Addresses assignment beyond expectation	
Demonstrates the ability to develop and support ideas	■ Fails to remain on topic ■ Very little development of ideas ■ Details are lacking or irrelevant	■ Attempts to address topic buy may occasionally deviate ■ Contains ideas, but may lack development or support ■ Provides details but some may not be relevant to topic	■ Remains mostly on topic ■ Contains mostly well-developed and supported ideas ■ Many details relevant to topic	■ Contains well-developed and supported ideas ■ Most details relevant to topic	■ Contains a wide variety of well-developed and supported ideas ■ Includes many specific and illustrative details relevant to topic	
Utilizes effective organizational methods	■ Disorganized and difficult to follow ■ Very little logical order ■ Almost no transitions among sentences or between paragraphs	■ Has a beginning, middle and end but may not be developed adequately ■ Order is present but may be confusing to reader ■ Transitions evident, but may not be appropriate (contrived, illogical, inconsistent)	■ Has a beginning, middle and end ■ Has some logical order ■ Includes mostly appropriate transitions among sentences and between paragraphs	■ Has a developed beginning, middle and end ■ Has a strong logical order ■ Includes appropriate transitions among sentences and between paragraphs	■ Has a clear, effective and developed beginning, middle and end ■ Has highly-developed logical order ■ Includes sophisticated and smooth transitions among sentences and between paragraphs	
Demonstrates a quality style and voice	■ Word choice is repetitive, vague, or simplistic; uses non-standard English inappropriately; fails to leave any impression on the reader ■ Voice is bland, nondescript, or inappropriate to assignment's purpose and audience ■ No attempt to vary sentence length and structure	■ Most word choice is repetitive or simplistic ■ Voice is evident but may not be appropriate to assignment's purpose and audience ■ Attempts to vary sentence length and structure not particularly effective	■ Some word choice is effective ■ Voice in the paper is mostly appropriate to assignment's purpose and audience ■ Some sentences varied in length and structure	■ Most word choice is effective ■ Voice in the paper is appropriate to assignment's purpose and audience ■ Most sentences varied in length and structure	■ Word choice is effective, vivid, and leaves a strong impression on the reader ■ Voice (i.e., tone, personality) is appropriate to assignment, purpose and audience and is consistent throughout writing ■ Varies sentence length and structure in a sophisticated way (rhythm, parallel structure, varied sentence beginnings, etc.)	
Utilizes standard, accepted conventions	■ Fails to use standard English ■ Errors in spelling and capitalization; mechanics; and usage and they do distract from the overall impression ■ Material not cited properly	■ Uses standard English most of the time but lapses into misuse; somewhat distracting ■ Errors in spelling, capitalization, mechanics, and usage that border on distracting from the overall impression	■ Uses standard English; little or no distraction from message ■ May contain errors in spelling and capitalization; mechanics; and usage but they do not distract from the overall impression	■ Uses standard English ■ May contain errors in spelling and capitalization; mechanics; and usage but they do not detract from the overall impression	■ Uses standard English ■ Contains few or no errors in spelling and capitalization; mechanics (punctuation); and usage (e.g., proper verb tenses, subject/verb agreement, pronoun/antecedent agreement, etc.)	

Student Name:	Course:	Assignment:	Faculty:	Date:	Total Score:

Inquiry Rubric

Inquiry Competency 6.2/ Application of Scientific & Mathematical Principles

Criteria	Insufficient (1)	Emerging (2)	Acceptable (3)	Proficient (4)	Exemplary (5)	Score 1-5
Evaluate scientific and/or mathematical information to address a specific problem	■ Makes no attempt to identify variables ■ Unable to identify relevant information ■ Unable to choose formula appropriate for problem	■ Identifies some variables specific to the problem ■ Information identified is partially relevant ■ Formula or test chosen does not adequately address the problem	■ Identifies variables specific to the problem ■ Identifies information relevant to specific problem ■ Identifies the appropriate formula or test to address the problem	■ Identifies multiple variables specific to the problem ■ Identifies information relevant to more than one layer of the specific problem ■ Chooses more than one formula to address layers of specific problem	■ Identifies multiple and complex variables ■ Identifies information relevant to multiple layers of the specific problem ■ Chooses multiple formulas to address layers of specific problem	
Apply scientific and/or mathematical information to address a specific problem	■ Unable to apply information to problem ■ Validity of results not evaluated	■ Partially applies formula or test to the problem ■ Evaluates some of the results for validity	■ Correctly applies the formula or test to the problem ■ Evaluates results for validity	■ Correctly applies several formulae for different aspects of the problem ■ Evaluates multiple results for validity	■ Correctly applies multiple formulae for all tests ■ Insightfully evaluates multiple results for validity	
Summarize results using appropriate modality (e.g. charts, graphs, tables, etc.)	■ No summary evident in any modality ■ No descriptors evident ■ No information displayed accurately	■ Chooses appropriate modality for portion of summary ■ Some appropriate descriptors used in chosen modality ■ Some information displayed accurately	■ Chooses appropriate modality for summary ■ Appropriate descriptors used in chosen modality ■ Information accurately displayed	■ Chooses more than one appropriate modality for summary ■ Relationship of more than one variable shown in choice of descriptors ■ Information displayed accurately and professionally	■ Multiple modalities used for summary ■ Relationship of multiple variables shown in choice of descriptors ■ Information displayed accurately in a manner consistent with standards of current scholarship	

Student:	**Course:**	**Assignment:**	**Faculty:**	**Date:**	**Total Score:**

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