MARTIN COMMUNITY COLLEGE **COURSE SYLLABUS**

Semester/Year: SPRING 2011

INSTRUCTOR: **Daniel Price COURSE NUMBER:** MAT 161 – LC1

COURSE TITLE: College Algebra **OFFICE NO:** Building 4, Office 12a

CREDIT HOURS: 3 Hours **OFFICE/VIRTUAL HOURS:** M,T,TH,F 9:00-10:00

M,T,TH,F 11:00-12:30

CONTACT HRS/WK: 3 Class W 12:00-3:00

PREREQUISITES: MAT 080, MAT 090 or appropriate

> score on placement test. PHONE NO: (252) 789-0209

COREQUISITES: None FAX: (252)792 - 0826

> E-MAIL: dprice@martincc.edu

COURSE DESCRIPTION:

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics for the Associate in Arts Degree.

PROGRAM LEARNING OUTCOMES:

- 1. Apply critical thinking skills to problem-solving.
- 2. Demonstrate appropriate use of relative technology.
- 3. Demonstrate effective oral and written communication skills.

COURSE LEARNING OUTCOMES:

At the completion of this course students should be able to:

- 1. Simplify algebraic expressions, using the rules of arithmetic, laws of exponents, absolute value, and logarithms.
- 2. Solve linear, quadratic and related equations and inequalities, as well as systems of equations and inequalities.
- 3. Perform basic operations on polynomials including factoring and finding their zeros both real and complex.
- 4. Perform basic operations on functions including composition, and graph linear and other functions, including using geometric transformations.
- 5. Set up and solve application problems.

REQUIRED TEXTBOOKS:

Lial, M. (2009). *College Algebra*, (10th ed.). Upper Saddle River, NJ: Pearson, Addison Wesley.

ISBN: 0-321-49913-1

SUPPLEMENTAL RESOURCES:

- 1) Student Solutions Manual. Worked solutions to all odd-numbered exercises from the text and complete solutions for chapter review problems. ISBN: 0-13-092452-0
- 2) Lecture Videos. The instructional tapes, in a lecture format, feature worked-out examples and exercises taken from each section of the text. ISBN: 0-13-091458-4
- 3) Sullivan Companion Website. www.prenhall.com/sullivan This text-specific website beautifully complements the text. Here students can find chapter tests, section-specific links, and PowerPoint downloads in addition to other helpful features.

LEARNING/TEACHING METHODS:

Lecture, student discussion, outside reading assignments, guided and independent practice.

ASSESMENTS/METHODS OF EVALUATION:

To demonstrate attainment in program and course learning outcomes for MAT 161, one must achieve an overall average of 70% or better. To achieve these outcomes, you must successfully complete the following:

1. Major Tests (Covers 1 or 2 Chapters, takes the entire class period)

Average will count 40%

2. Quizzes, Homework Assignments, & Outside Reading Assignments

Average will count 40% Exam will count 20%

3. Final Exam

GRADING POLICY:

Grades will be assigned on the following scale:

93 – 100% A 85 – 92% B 77 – 84% C 70 – 76% D Below 70% F Administrative Withdrawal WF*

COURSE OUTLINE:

Chapter R – Review 1 Weeks 1 - 2

Chapter 1 – Equations and Inequalities

Chapter 2 – Graphs Weeks 3 - 4

Chapter 3 – Functions and Their Graphs

Chapter 4 – Polynomial and Rational Functions

(Sections 4.1 & 4.2 Only)

Chapter 5 – The Zeros of a Polynomial Function Weeks 5 - 7

Chapter 6 – Exponential and Logarithmic Functions

(Omit Section 6.8)

Chapter 8 – Systems of Equations and Inequalities

(Sections 8.7 and 8.8 Only)

Exam Week 8

STUDENT ATTENDANCE POLICY:

- The current MCC Attendance Policy applies. Attendance at every class is necessary for maximum benefits from this course. Students are required to attend class a minimum of 85% of the time in order to receive credit for the course. Three tardies and/or early departures equal one hour's absence. Missing more than 10 minutes at the beginning or end of class will constitute an absence not a tardy.
- Absence from class may be excused in the following circumstances:

Verifiable death of an immediate family member

Verifiable hospitalization of self or immediate family member

Documented emergency at the discretion of the instructor.

(Definition of "immediate family member," mother, father, sibling, spouse, child, grandparent)

- Students will be counted absent from the date of registration.
- Students must be present in at least one class during the first ten percent of a course in ordered to be considered enrolled in the class. If a student has not attended at least one class by the ten percent census date, the instructor will administratively withdraw the student.
- Students who miss more than six contiguous contact hours may be administratively withdrawn from the class by the instructor and given a grade of "WF." The "WF" will be equivalent to an "F" when calculated into the student's GPA.

^{*}Administrative withdrawal is used when students do not meet the attendance requirement.

• Students may remove a "WF" by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw without receiving an "F." The last day to officially withdraw without receiving an "F" is published in the academic calendar for each academic year.

REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES

- In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.
 - O Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The *Request for Excused Absences for Religious Observances* form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

COURSE POLICIES:

Assignment Due Dates:

All assignments are due at the beginning of a class period. If a student is absent when an assignment is due it is their responsibility to see that the instructor receives that assignment the next time the student is in class.

Make-up Policy:

If a student is absent when graded work is done in class, he/she will receive a grade of "0" for that work. Test can be made up only in cases of legitimate verifiable absences and must be made up with-in three days.

Cellular Phones and Pagers

Cell phones and pagers should be set to silent mode before entering class.

Academic Integrity Statement

The President or any other authorized college official may dismiss, suspend, or expel any student who disrupts the legal mission, educational processes or function of the college, (see Student Governance and Conduct Code). Deliberately cheating or knowingly and intentionally engaging in acts of plagiarism is a violation of the Student Governance and Conduct Code (see Student governance and Conduct page 47). Cheating will result in a failing grade for the course and possible expulsion.

Open Door Policy

Martin Community College is an equal opportunity institution and maintains an "open door policy" for eligible applicants and serves all students regardless of race, color, creed, sex, age, handicap, religion, or national origin.

Contact Person

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at (252) 789-0246 or (252) 789-0247 by phone, pbroughton@martincc.edu by e-mail, or in person at her office in Building 2, Room 33.

Martin Community College Career Catalog

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

Disability Statement

Martin Community College Supports the Americans with Disabilities Act and is sensitive to the needs of applicants with documented disabilities. If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.