Martin Community College
Course Syllabus
Spring/2011

COURSE NUMBER: MAT 060 (5H1E)   **INSTRUCTOR:** Daniel Price

COURSE TITLE: ESSENTIAL MATHEMATICS   **OFFICE NO:** Building 4, Room 12a

CREDIT HOURS: 4   **OFFICE HOURS:**
          2:30-3:30 M,T,W,Th,F
          5:30 -6:00 T,Th

CONTACT Hours: 5   **PHONE NUMBER:** (252) 789-0209

PREREQUISITES: MAT 50 or appropriate score   **FAX:** (252) 792-0826
          on placement test

COREQUISITES: None   **E-MAIL:** dprice@martincc.edu

COURSE DESCRIPTION:
This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

PROGRAM LEARNING OUTCOMES:
1. Apply critical thinking skills to problem-solving.
2. Demonstrate use of appropriate discipline-related technology.
3. Demonstrate entry level skills needed for the first college-level course in the curriculum.

COURSE LEARNING OUTCOMES:
1. Compute basic calculations involving whole numbers, fractions, decimals and real numbers.
2. Analyze and solve problems using problems using problem solving skills involving ratio, proportion, percents, perimeter, area, and volume.
3. Explain and compute terms used in basic statistics; mean, median, mode, and draw graphs used in basic statistics.

COURSE COMPETENCIES:
At the completion of this course the students should be able to:
1. Read and write whole numbers and decimal numbers.
2. Give the place value of digits in whole numbers and decimal numbers.
3. Add, subtract, multiply, and divide with whole numbers, fractions, and decimal numbers.
4. Round whole number and decimal numbers to an indicated place value.
5. Estimate and solve word problems with whole numbers, fractions, and decimal numbers.
6. Use divisibility tests to determine if a whole number is divisible by 2, 3, 5, 10.
7. Fine prime factorizations of whole numbers.
8. Evaluate whole numbers with whole number exponents.
9. Find the square root of a perfect square number.
10. Use order of operations to evaluate expressions.
11. Find equivalent fractions.
12. Convert between fractions and decimals.
13. Add, subtract, multiply, and divide with whole numbers, integers, and real numbers.
14. Use the calculator to do computations of number systems.
15. Define ratios and proportions.
16. Use problem solving skills to solve a problem.
17. Solve percents.
18. Compute commission, percent of increase/decrease, and interest.

19. Make graphs such as bar graphs, line graphs, and circle graphs.
20. Calculate mean, mode, and median.
21. Know the difference between American units and Metric units.
22. Convert between the two different units.
23. Solve one-step, two-step, and multi-step equation.

REQUIRED TEXTBBOKS:

Bittinger, M. (2007) *Basic college mathematics* w/MathXL. Boston, Massachusetts: Addison Wesley. ISBN: 9780321734273.

SUPPLEMENTAL RESOURCES:

1) **Calculator - TI-30x**

2) **MyMathLab (student)**

   MyMathLab is an all-in-one, online tutorial, homework, assessment, course management tool with the following student features.
   - **The entire textbook online with links to multimedia resources**-video clips, practice exercises, and animations-that are correlated to the textbook examples and exercises.
   - **Online tutorial, homework, and tests**
   - **A personalized Study Plan** generated based on student test results. The Study Plan links directly to unlimited tutorial exercises for the areas students need to study and re-test, so they can practice until they have mastered the skills and concepts.
   - http://www.mymathlab.com

3) **MathXL Tutorials on CD (ISBN: 0-321-29747-4)**

   The interactive tutorial CD-ROM provides:
   - Algorithmically-generated practice exercises correlated at the objective level.
   - Practice exercises accompanied by an example and guided solution.
   - Tutorial video clips within the exercise to help students visualize concepts.
   - Easy-to-use tracking of student activity and scores and printed summaries of students' progress.

4) **Interact Math www.interactmath.com**

   The power of MATHXL text-specific tutorial exercises available for unlimited practice online, without an access code, and without tracking capabilities.

5) **Academic Skills Center (ASC)**

   This center is located in Building 4 Room 38B on the Main Campus. Each semester a schedule of hours is posted and students may drop in at any time to receive extra help in any course. The center has tutorial software in a variety of courses along with instructors and peer tutors to assist students. Use of this resource has been extremely helpful to students taking MAT 060 in the past.

LEARNING/TEACHING METHODS:

1. Lecture
2. Handouts will be used for clarification of information
3. Supervised Practice
4. Outside Reading Assignments
5. Computer Assisted Practice

ASSESSMENT:

To demonstrate attainment in program and course learning outcomes for MAT 060, one must achieve an overall average of 77% or better. To achieve these outcomes, you must successfully complete the following:

1.	Major Tests	Average will count 50%
2.	Quizzes, Outside Assignments and Graded Homework	Average will count 15%
3.	Hybrid Assignments and Outside Reading Assignments	Average will count 15%
4.	Final Exam	Exam will count 20%

GRADING POLICY:
Grades will be assigned on the following scale:

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

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

COURSE OUTLINE:
THIS IS A GUIDE AND IS SUBJECT TO CHANGE! KEEPING UP WITH CHANGES IS YOUR RESPONSIBILITY.

CHAPTER	TOPIC	WEEK
Chapter 1	Whole Numbers	1
Chapter 2	Fractions Notation: Multiplication and Division	1-2
Chapter 3	Fractions Notation and Mixed Numerals	2
Chapter 4	Decimal Notation	3
Handouts	Calculator	4
Chapter 5	Ratio and Proportion	5
Chapter 6	Percent Notation	6-7
Chapter 7	Data, Graphs, and Statistics	8
Chapter 8	Measurement	9-10
Chapter 10	Real Numbers	11-12
Chapter 11	Algebra: Solving Equations and Problems	13-14
Chapter 9	Geometry	15
	Review & Exam	16

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 the face to face class meetings a minimum of 85% of the time in order to receive credit for the course. Attendance for the hybrid portion of the course will be accounted for in given assignments. 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.
- 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.

***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.**

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) <u>prior to the census date of each class.</u> 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. If this happens frequently a student's grade for that work may be lowered 10 points each day that it is late.

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. In computing the quiz average the lowest grade for each student will be dropped before averaging. Test can be made up only in cases of legitimate verifiable absences and must be made up within 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.

Accessing the MCC 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.