MARTIN COMMUNITY COLLEGE COURSE SYLLABUS Semester/Year: SPRING 2011

COURSE NUMBER:	MAT 060 (5H1)	INSTRUCTOR: Joshua Noonan	
COURSE TITLE:	Essential Mathematics	OFFICE NO: Building 4, Room 23A	
CREDIT HOURS:	4	OFFICE/VIRTUAL HOURS: Monday - Thursday 12-1pm	
CONTACT HRS/WK: 5 (3 class, 2 lab)			
PREREQUISITES: MAT 050 or appropriate		PHONE NO: (252)789- 0299	
score on placement test		FAX: (252)792-0826	
COREQUISITES:	None	E-MAIL: jnoonan@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 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.

OTHER OBJECTIVES:

The student will be able to:

- 1. Add, subtract, multiply, and divide with whole numbers, integers, and real numbers.
- 2. Use the calculator to do computations of number systems.
- 3. Define ratios and proportions.
- 4. Use problem solving skills to solve a problem.
- 5. Solve percents.
- 6. Compute commission, percent of increase/decrease, and interest.
- 7. Make graphs such as bar graphs, line graphs, and circle graphs.
- 8. Calculate mean, mode, and median.
- 9. Know the difference between American units and Metric units.
- 10. Convert between the two different units.
- 11. Solve one-step, two-step, and multi-step equation.

COURSE COMPETENCIES:

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

- 12. Read and write whole numbers and decimal numbers.
- 13. Give the place value of digits in whole numbers and decimal numbers.
- 14. Add, subtract, multiply, and divide with whole numbers, fractions, and decimal numbers.
- 15. Round whole number and decimal numbers to an indicated place value.
- 16. Estimate and solve word problems with whole numbers, fractions, and decimal numbers.
- 17. Use divisibility tests to determine if a whole number is divisible by 2, 3, 5, 10.
- 18. Fine prime factorizations of whole numbers.
- 19. Evaluate whole numbers with whole number exponents.
- 20. Find the square root of a perfect square number.
- 21. Use order of operations to evaluate expressions.
- 22. Find equivalent fractions.
- 23. Convert between fractions and decimals.
- 24. Add, subtract, multiply, and divide with whole numbers, integers, and real numbers.
- 25. Use the calculator to do computations of number systems.
- 26. Define ratios and proportions.
- 27. Use problem solving skills to solve a problem.
- 28. Solve percents.
- 29. Compute commission, percent of increase/decrease, and interest.
- 30. Make graphs such as bar graphs, line graphs, and circle graphs.
- 31. Calculate mean, mode, and median.
- 32. Know the difference between American units and Metric units.
- 33. Convert between the two different units.
- 34. Solve one-step, two-step, and multi-step equation.

REQUIRED TEXTBOOKS: Bittinger, Marvin L. (2005). *Basic college mathematics with early integers* (2nd ed.). New York: Pearson/Addison Wesley.

SUPPLEMENTAL RESOURCES: Calculator - TI-84 plus edition graphing calculator preferred

LEARNING/TEACHING METHODS: Lecture, handouts for clarification of information, supervised practice, computer-assisted practice, outside reading assignments

ASSESMENTS/METHODS OF EVALUATION:

- 1. Final Examination 20%
- 2. Average of Test Scores 60%
- 3. Average of Quizzes/Homework 15%
- 4. Outside Reading Assignments 5%

GRADING POLICY: The student must have a cumulative average of at least 77% to receive credit for this course.

A = 100 - 93 % B = 92 - 85 % C = 84 - 77 %F = 76% and below

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 9	Geometry	10-11
Chapter 10	Real Numbers	12-13
Chapter 11	Algebra: Solving Equations and Problems	14-15
	Review & Exam	16

STUDENT ATTENDANCE POLICY: The Martin Community College Attendance Policy is in effect, as well as the administrative withdrawal policy. Students must attend at least once within the first 10% of the scheduled hours of the class in order to be enrolled, or their names will be removed from the attendance roster. Students missing more that 6 (six) contiguous contact hours without contacting, and speaking to the instructor or more than 10% of the total contact hours may be administratively withdrawn from class, and in that case will receive a "WF" which counts as an "F" as their final grade. Students may only be readmitted to class with the written approval of the instructor, as the instructor must file a form with the registrar in order to readmit the student. Students who have been administratively withdrawn from a class will not be allowed in the welding shop for liability reasons. The student is responsible for all material covered, including any announcements, such as test dates made while he/she was out. A student may remove the "WF" grade by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw from this class is March 31.

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.

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.

Since this is a hybrid class, attendance will be taken at seated class sessions and through Blackboard assignments.

TESTING POLICY:

Students must notify the instructor BY EMAIL (this allows verification of time), BEFORE the test in order to qualify for a makeup. If a student fails to take a test at the announced time, he or she must provide a written, verifiable, medical reason for the absence in order to qualify for a makeup. Students may make up ONE exam if the student has such a reason. Missing a test or an arranged time for to makeup a test will result in a zero for a grade.

ACADEMIC INTEGRITY POLICY:

Lying, cheating and plagiarism are forms of academic dishonesty that violate the integrity of any academic process and will not be tolerated. For purposes of this class:

Lying includes but is not limited to falsifying information provided as verification for the reason you were not able to complete work on time.

Cheating is but is not limited to:

1. Receiving, giving, or helping another student receive or give any information during a quiz, test, examination, or individual assignment without the express permission of the instructor.

2. Copying work from another student, or submitting work done by another student as your own.

3. Using unauthorized materials or equipment during a quiz, test, or examination, e.g. notes or books or electronic devices.

4. Communicating the subject matter or contents of a quiz, test, or examination to another student unless specifically authorized by the instructor to share it.

5. Taking a quiz, test, or examination for another student.

6. Obtaining quiz, test, or examination questions beforehand, including viewing any quiz, test or examination presented on the Internet before answering for submission.

7. Tampering with the grading of a quiz, test, or examination.

8. Working with others in completing take-home quizzes, tests, examinations, or individual assignments unless the instructor specifically authorizes collaborative work.

Any violation of academic integrity will result in disciplinary action. An instructor, department head or the Dean of Academic Affairs and Student Services may impose either of the following disciplinary actions for a violation of academic integrity:

Loss of Grade: an instructor may give a zero for the assignment, quiz, or test.

Loss of Credit: the student will receive an F for the course and will be dropped from the current semester roll.

OTHER COURSE POLICIES:

1. No food or drink is allowed in the classroom, or laboratory, as this is a violation of OSHA standards. Food or drink brought into the room will be confiscated, as will any makeup that is taken out of a purse or backpack. This is a professional work environment, not a lounge area; cultivate a professional attitude and professional conduct and behavior now. Unprofessional habits are hard to break later on!

2. Attendance is taken by signing the roll for each hour. Failure to sign the roll will result in an absence for that period. It is the student's responsibility to sign the roll, even if you come in late. If your name is not on the role you will be marked absent.

3. It is your responsibility to keep track of your absences, the instructor will not warn you when you are close to or over the limit. If you cannot remember when you were absent, you did not have a memorable and therefore not particularly important reason for being absent. As future professionals, you are expected to cultivate professionalism as part of your education. Attending class regularly is a sign of maturity and commitment. You will not keep a job if you miss work often, nor will you receive a passing grade in this class.

4. Three tardies are counted as one hour of absence for attendance purposes.

5. You are responsible for material covered in class whether you are present or not including announcements of class-work due or test date changes if it becomes necessary.

6. Confirmed Test Dates are announced two class meetings in advance! If you are absent on the day a test is announced, you are still responsible for taking the test on time.

7. There is to be no talking during a test/an exam. Raise your hand and wait to be recognized by the instructor before speaking. Any student talking during a test/an exam will receive a zero for a grade.

8. Exams will begin and end on time; students arriving late will **not** receive additional time. **Do not arrive late for tests or exams!**

9. If you leave the room for any reason during an exam, you will be required to turn in your test, and you will not get it back. Visit the restroom before beginning the exam.

10. Cell phone use is prohibited during class. This includes "bluetooth" and any other hands free devices. If your cell phone goes off during a test, you will receive a zero for the grade for that test.

11. In an instructor fails to report for a class within 15 minutes of the scheduled beginning time and has not left instructions, those students present should sign a sheet before leaving and designate a student to submit it to the Dean of Academic Affairs and Student Services.

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, <u>pbroughton@martincc.edu</u> by e-mail, or in person at her office in Building 2, Room 33.

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

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.