MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Semester/Year: Spring 2011

COURSE NUMBER: MAT 120 – 5H1

INSTRUCTOR: Gretchen Thompson

COURSE TITLE: Geometry and Trigonometry

OFFICE NO: Building 4, Office 5

CREDIT HOURS: 3

OFFICE/VIRTUAL HOURS: T W TH   2:30 – 3:30

CONTACT HRS/WK: 4 (2 Class, 2 Lab)

PHONE NO: (252) 789-0273

PREREQUISITES: MAT 070 or MAT 080 or MAT 090 or MAT 095

FAX: (252) 792 – 0826

E-MAIL: gthompson@martincc.edu

COREQUISITES: None

COURSE DESCRIPTION:
This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

PROGRAM LEARNING OUTCOMES:
1. Demonstrate appropriate mathematical skills required for academic and work-related tasks.
2. Apply principles of sound critical thinking to analyze and solve problems and make logical decisions.
3. Demonstrate effective speaking, writing, and reading skills.
4. Demonstrate appropriate technology skills required for academic and work-related tasks.

COURSE LEARNING OUTCOMES:
At the completion of this course students should be able to:
1. Solve applied problems with whole numbers, fractions, decimals and percents using an appropriate calculator.
2. Solve problems using customary and metric measurement units, including conversions between units.
3. Use basic definitions and properties of plane and solid geometry in problem solving.
4. Compute areas and volumes of common polygons, circles, prisms, cylinders, pyramids and cones.
5. Use trigonometric functions to solve applied right and oblique triangle problems.

REQUIRED TEXTBOOKS:
Smith, Robert & Peterson, John C. (2007). *Introductory technical mathematics*, (5th ed.). Clifton Park, NY: Thompson, Delmar
   Learning. ISBN: 1-4180-1543-1

SUPPLEMENTAL RESOURCES:
1) Calculator - TI-30x
2) Student Solutions Manual. Worked solutions to all odd-numbered exercises from the text.
    ISBN: 1-4180-1546-6

LEARNING/TEACHING METHODS:
   Lecture, student discussion, guided and independent practice, and outside reading assignments.

ASSESMENTS/METHODS OF EVALUATION:

To demonstrate attainment in program and course learning outcomes for MAT 120, one must achieve an overall average of 70% or better. To achieve these outcomes, you must successfully complete the following:

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

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*

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

COURSE OUTLINE:

Fundamentals of General Mathematics Chapters 1 – 6	Weeks 1 – 2
Measurement Chapters 7 - 9	Weeks 3 – 4
Fundamentals of Plane Geometry Chapters 19 – 25	Weeks 5 – 8
Geometric Figures: Area and Volumes Chapters 26 – 30	Weeks 9 – 12
Fundamentals of Trigonometry Chapters 33 – 36	Weeks 13 – 15
Review and Exam	Week 16

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

STUDENT ATTENDANCE POLICY:

- The current MCC Attendance Policy applies which can be found in the Martin Community College Career Catalog for policies and curriculum requirements online at www.martincc.edu. 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.

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) 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. 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:
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. Deliberately cheating or knowingly and intentionally engaging in acts of plagiarism is a violation of the Student Governance and Conduct Code. 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 – 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.