



# MAT 1012(T/R) COURSE SYLLABUS WEB-ENHANCED/ LECTURE SPRING SEMESTER 2016(FY 16)

Semester: SPRING 2016 FY 16  
Course Title: Foundations of Mathematics  
Course Number: MAT 1012  
Credit Hours/Minutes: 3 / 2250  
Class Location: Room 320  
Class Time: 9:30-10:45AM T/R  
CRN:

Instructor: Jimmy Dupree  
Office Hours: 7:00-8:00AM, 1:30-3:30PM M-R  
Office Location: 409  
Email Address: [jdupree@southeasterntech.edu](mailto:jdupree@southeasterntech.edu)  
Phone: 1.912.538-1957  
Tutoring Hours: Upon request

**REQUIRED TEXT:** Bittinger, Beecher, Johnson (©2015). Basic Mathematics (12<sup>th</sup> edition). Pearson Education, Inc.

**REQUIRED SUPPLIES:** 3 ring binder notebook, loose leaf paper, pencils, black erasable pens, highlighter, and a Texas Instruments TI-30XIIS scientific calculator or any scientific calculator for limited use in the course. **Chapters 1-4 must be completed without the use of a calculator.**

**COURSE DESCRIPTION: MATH 1012 - Foundations of Mathematics** ( 3 credit hours, 2250 minutes)  
Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, percents, ratios and proportions, measurement and conversion, formula manipulation, technical applications, and basic statistics. [OL]

**COMPETENCIES:** Topics include: Fractions, decimals, percents, ratio and proportion, measurement and conversion, formula manipulation, technical applications, and basic statistics.

**PRE-REQUISITE:** MATH 0090 – Modules 1-6(completed) OR Appropriate arithmetic placement test score.

#### **COURSE OUTLINE:**

- |                         |                               |
|-------------------------|-------------------------------|
| 1. Fractions            | 5. Measurement and Conversion |
| 2. Decimals             | 6. Formula Manipulation       |
| 3. Percents             | 7. Technical Applications     |
| 4. Ratio and Proportion | 8. Basic Statistics           |

**GENERAL EDUCATION CORE COMPETENCIES:** STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

**STUDENT REQUIREMENTS:** Students are expected to keep assigned work in a notebook and pass competency tests at scheduled times. Quizzes and homework grades may be given at any time without prior notice.

**ATTENDANCE GUIDELINES:** Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and also interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of F and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an F in a course.

**SPECIAL NEEDS:** *Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact Jan Brantley, Room 1208 Swainsboro Campus, 478-289-2274, or Helen Thomas, Room 108 Vidalia Campus, 912-538-3126, to coordinate reasonable accommodations.*

**SPECIFIC ABSENCES:** Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

**PREGNANCY:** Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please advise me and make appropriate arrangements with the Special Needs Office. Swainsboro Campus: Jan Brantley, Room 1208, (478) 289-2274 -- Vidalia Campus: Helen Thomas, Room 108, (912) 538-3126.

**WITHDRAWAL PROCEDURE:** Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" is assigned when the student completes the withdrawal form from the course.

Students who are dropped from courses due to attendance (see your course syllabus for attendance policy) after drop/add until the 65% point of the semester will receive a "W" for the course. Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of 'F' being assigned.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be accessed due to the withdrawal. All grades, including grades of 'W', will count in attempted hour calculations for the purpose of Financial Aid.

**Remember** - Informing your instructor that you will not return to his/her course does not satisfy the approved withdrawal procedure outlined above.

**MAKEUP GUIDELINES (Tests, quizzes, homework, projects, etc...):** A grade of zero will be assigned for any missed assignment regardless of the reason.

**ACADEMIC DISHONESTY POLICY:** The STC Academic Dishonesty Policy states *All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline.* The policy can also be found in the *STC Catalog and Student Handbook.*

### **Procedure for Academic Misconduct**

The procedure for dealing with academic misconduct and dishonesty is as follows:

#### **--First Offense--**

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

#### **--Second Offense--**

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

#### **--Third Offense--**

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

**STATEMENT OF NON-DISCRIMINATION:** Southeastern Technical College does not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, disabled veteran, veteran of Vietnam Era or citizenship status, (except in those special circumstances permitted or mandated by law). This school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

**GRIEVANCE PROCEDURES:** Grievance procedures can be found in the Catalog and Handbook located on STC's website.

**ACCESS TO TECHNOLOGY:** Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the STC website at [www.southeasterntech.edu](http://www.southeasterntech.edu).

**GRADING POLICY**

- 25% Math XL
- 10% Quizzes
- 40% Tests
- 25% Comprehensive Final Exam

**GRADING SCALE**

- A: 90-100
- B: 80-89
- C: 70-79
- D: 60-69
- F: 0-59

**TCSG GUARANTEE/WARRANTY**

**STATEMENT:** *The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

<b>MAT 1012 LESSON PLAN FOUNDATION OF MATHEMATICS</b>				
<ul style="list-style-type: none"> <li>• Homework should be done on notebook paper and should be easy to read and grade. Turn in high-quality work you can be proud of by showing ALL work with each problem.</li> <li>• You have a Mathxl Access Code that will be used for such things as homework, quizzes, or tests. Your instructor will give you directions during class on how to register and login properly to mathxl.</li> <li>• Calculators will not be allowed until chapter 5 except where indicated by your instructor or with specific homework problems. Thus, students are expected to show work for all long multiplication, long division, LCD work with fractions, etc... Proof must be shown that you know how to do the problems without a calculator in order to receive credit.</li> </ul>				
Meetings	Chapter	Objectives	Assignments	Competency
1-4	1 Whole Numbers	Standard Notation Addition Subtraction Multiplication Division Rounding and estimating; Order Solving Equations Applications and Problem Solving Exponential Notation and Order of	1.1: Every Other Odd (EOO) 1.2: EOO 1.3: EOO 1.4: EOO 1.5: EOO 1.6: EOO 1.7: EOO 1.8: EOO 1.9: EOO	1, 6, 7 A,B

		Operations	<b>Homework Competency Test Objective Quiz(zes)</b>	
5-7	2 Fractions	Factorizations Divisibility Fractions and Fraction Notation Multiplication and Applications Simplifying Multiplying, Simplifying, and Applications Division and Applications	2.1: EOO 2.2: EOO 2.3: EOO 2.4: EOO 2.5: EOO 2.6: EOO 2.7: EOO <b>Homework Objective Quiz(zes)</b>	1, 6, 7 A,B
8-9	3 Fraction Notation and Mixed Numerals	Least Common Multiples Addition and Applications Subtraction, Order, and Applications Mixed Numerals Addition and Subtraction Using Mixed Multiplication and Division Using Mixed Order of Operations; Estimation	3.1: EOO 3.2: EOO 3.3: EOO 3.4: EOO 3.5: EOO 3.6: EOO 3.7: EOO <b>Objective Quiz(zes) Competency Test</b>	1, 6, 7 A,B
10-12	4 Decimals	Decimal Notation; Order; Rounding Addition and Subtraction Multiplication Division Converting: Fraction to Decimal Estimating Applications and Problem Solving	4.1: EOO 4.2: EOO 4.3: EOO 4.4: EOO 4.5: EOO 4.6: EOO 4.7: EOO <b>Homework Objective Quiz(zes) Competency Test</b>	2, 6, 7 A,B
13-15	5 Ratio and Proportion	Introduction to Ratios Rates and Unit Prices Proportions Application of Proportions Geometric Applications	5.1: EOO 5.2: EOO 5.3: EOO 5.4: EOO 5.5: EOO <b>Homework Objective Quiz(zes) Competency Test</b>	4, 6, 7 B,C
15-18	6 Percent Notation	Percent Notation Percent and Fraction Notation Solving Percent problems, using percent equations Solving Percent problems, using Prop. Applications of Percent Percent Applications Sales Tax, Commission, Discount	6.1: EOO 6.2: EOO 6.3: EOO  6.4: EOO 6.5: EOO  6.6: EOO <b>Homework Objective Quiz(zes) Competency Test</b>	3, 7 B,C
19-21	7 Data, Graphs, and Statistics	Average, Median, and Modes Tables and Pictographs Bar Graphs and Line Graphs Circle Graphs	7.1: EOO 7.2: EOO 7.3: EOO 7.4: EOO <b>Homework Objective Quiz(zes) Competency Test</b>	7, 8 B,C
22-25	8 Measurement	Linear Measures: American Units Linear Measures: Metric Units Converting between American/Metric Weight and Mass: Medical Apps Capacity: Medical Apps Time and Temperature	8.1: EOO 8.2: EOO 8.3: EOO 8.4: EOO 8.5: EOO 8.6: EOO <b>Homework Objective Quiz(zes) Competency Test</b>	4, 5, 7 C
26-28	9 Geometry	Perimeter Area Circles Volume	9.1: EOO 9.2: EOO 9.3: EOO 9.4: EOO	6, 7 C

		Angles and Triangles Square Roots and Pythagorean Theorem	9.5: EOO 9.6: EOO <b>Homework</b> <b>Objective Quiz(zes)</b> <b>Competency Test</b>	
29		Final Review		ALL
30		Final Exam		ALL

\*Students who have passed the course with an A, B, or C should contact their advisor regarding the WorkKeys Applied Mathematics Exam. Passing this exam is a requirement for graduation

**Competency Areas**

- |                         |                               |
|-------------------------|-------------------------------|
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| 2. Decimals             | 6. Formula Manipulation       |
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**GENERAL EDUCATION CORE**

**COMPETENCIES:** STC has identified the following general education core competencies that graduates will attain:

- A. The ability to utilize standard written English.
- B. The ability to solve practical mathematical problems.
- C. The ability to read, analyze, and interpret information.

**\*\*\*\*Instructor reserves the right to change the syllabus and/or lesson plan as necessary.\*\*\*\***