



Math 1012 Foundations of Mathematics

COURSE SYLLABUS

Hybrid

Spring Semester 2018

COURSE INFORMATION

Credit Hours/Minutes: 3/2250

Class Location: Swainsboro Building 6 Room 6218

Class Meets: 40% Hybrid 60% F2F 8:00-9:15 am, MW-Monday, Wednesday

Course Reference Number (CRN): 40123

Preferred Method of Contact: [Don Davis \(ddavis1@southeasterntech.edu\)](mailto:ddavis1@southeasterntech.edu)

INSTRUCTOR CONTACT INFORMATION

Instructor Name: Mr. Don Davis

Office Location: Swainsboro Building 6 Room 6218 and Vidalia Main Building Room 409

Office Hours: Swainsboro 10:45-11:45am, MW-Monday, Wednesday and Vidalia 1:00-3:00pm, TR-Tuesday, Thursday

Email Address: [Don Davis \(ddavis1@southeasterntech.edu\)](mailto:ddavis1@southeasterntech.edu)

Phone: 912-538-1957

Fax Number: 912-538-3156

Tutoring Hours (if applicable): Vidalia 1:30-3:30 pm, TR-Tuesday, Thursday

This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student's convenience with respect to the instructor's requirements.

SOUTHEASTERN TECHNICAL COLLEGE (STC) CATALOG AND STUDENT HANDBOOK

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Student Handbook \(http://www.southeasterntech.edu/student-affairs/catalog-handbook.php\)](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php).

NO REQUIRED TEXT

NO REQUIRED TEXT. The text: Bittinger, Marvin L. Basic College Mathematics (12th edition): Boston: Pearson Education, Inc. is used. A MathXL Access Code is required. The MathXL access code can be purchased from the STC bookstore. The textbook package from the STC bookstore includes a MathXL Access code that is required to participate and complete all assignments for the course. (The 11th edition of the text will still work.)

REQUIRED SUPPLIES & SOFTWARE

3-ring binder notebook, loose-leaf paper, pencils, black erasable pens (optional per instructor), highlighter, and a Texas Instruments TI-30IIXS scientific calculator or any scientific calculator for limited use in the course.

Additional Requirements: Daily, access to a reliable internet connection for use with Blackboard, MathXL (required), mySTC, and college email.

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

COURSE DESCRIPTION

Emphasizes the application of basic mathematical skills used in the solution of occupational and technical problems. Topics include fractions, decimals, per-cents, ratios and proportions, measurement and conversion, geometric concepts, technical applications, and basic statistics.

MAJOR COURSE COMPETENCIES

1. Fractions, 2. Decimals, 3. Ratios and Proportions, 4. Percents, 5. Measurement and Conversion, 6. Geometric Concepts, 7. Technical Applications and 8. Basic Statistics.

PREREQUISITE(S)

MATH 0097 - Math II OR Appropriate arithmetic placement test score.

COURSE OUTLINE

1. Fractions
2. Decimals
3. Ratios and Proportions
4. Percents
5. Measurement and Conversion
6. Geometric Concepts
7. Technical Applications
8. Basic Statistics

BASIC STATISTICS GENERAL EDUCATION CORE COMPETENCIES

Southeastern Technical College 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 (HYBRID)

Students are expected to keep assigned work in a notebook and pass competency tests. Students should complete all assignments as scheduled and should have all supplies and access to software required by the course syllabus. This course requires the use of Blackboard, textbook websites and textbook software MathXL. Quizzes may be given at any time without prior notice, and homework may be assigned without prior notice. Makeup or late work on these assignments may or may not be accepted upon the discretion of the instructor. Students are expected to show high-quality, detailed work and/or explanations when completing all assignments. Forty percent (40%) of classroom instruction takes place out of class time. Students meet these requirements by completing MathXL Homework, Quizzes and Tests. MathXL includes homework tutorial features such as the Videos, Study Plan, or View an Example button. In addition, the students complete this

requirement by using the additional learning resources provided in our Blackboard course under the Math Resources / Help menu option. (A minimum of 1 hour and 30 minutes of out-of-class time per week is expected not including additional homework and study time. Most students spend more than 2 hours per week to be successful)

HYBRID ATTENDANCE

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 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 zero "0". Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) 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 [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 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 [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 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" (Withdrawn) 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 speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed 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.

EXIT EXAM

There is no Exit Exam. The course does require completion of a comprehensive Final Examination, which counts as 25% of the course grade. Each student will also take a standardized Math Competency Exam at the end of the Semester. This Exam is used by STC to measure the effectiveness of Mathematics instruction. Students who score 70 or above on the Math Competency Exam will have 10 points added to their Final Examination grade.

MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)

Failure to take tests or quizzes on the scheduled day will result in a grade of zero "0". No Make-up tests or quizzes will be given. MathXI assignments have a due date, which must be met. ALL MathXI work must be complete by the due date. All MathXI work not started in MathXI by the due date receives a grade of zero "0", all work in progress but not complete receives the grade in MathXI as of the due date.

ACADEMIC DISHONESTY POLICY

The Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and Student Handbook.

PROCEDURE FOR ACADEMIC MISCONDUCT

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

1. 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.

2. Second Offense

Student is given a grade of "WF" (Withdrawn Failing) 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.

3. 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 third 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

The Technical College System of Georgia and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, sex, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member 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).

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer	Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 st Street, Vidalia Office 108 Phone: 912-538-3126 Email: Helen Thomas hthomas@southeasterntech.edu	Blythe Wilcox, Director of Human Resources Vidalia Campus 3001 East 1 st Street, Vidalia Office 138B Phone: 912-538-3147 Email: Blythe Wilcox bwilcox@southeasterntech.edu

ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College'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 [Southeastern Technical College Website](http://www.southeasterntech.edu) (www.southeasterntech.edu).

TECHNICAL COLLEGE SYSTEM OF GEORGIA 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.

GRADING POLICY

Assessment/Assignment	Percentage
Homework	15%
Quizzes	10%
Tests	50%
Comprehensive Final Examination	25%

GRADING SCALE

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

Math 1012 Foundations of Mathematics

Spring Semester 2018 Lesson Plan

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
<p>~1 – 3 Instructional Hours</p> <p>Additional Learning time includes MathXL assignments, studying, and tutorials. This can often take 2.5 times the instructional time. Thus, it could take a student 2.5 X 3 hours = 7.5 hours to complete and learn the material for chapter 1.</p> <p>Keep a check on your College Email, Blackboard Announcements, and the Blackboard Calendar.</p> <p>Day 1 – Register for MathXL and/or Enroll using the instructor’s MathXL handout</p>	<p>1 - Whole Numbers</p> <p>No calculator on chapters 1 - 4</p>	<p>*Standard Notation *Addition *Subtraction *Multiplication *Division *Rounding and Estimating; Order *Solving Equations *Applications and Problem Solving *Exponential Notation and Problem Solving</p>	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 1: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL Homework Chapter 1: Register for MathxXL and complete the Chapter 1 Homework found under the Homework and Tests Button. We will discuss registration for</p>	<p>*1,2,3,4,5,6,7,8 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			<p>MathXL during day 1 of class.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.</p>	
4-6	2 - Fractions	<ul style="list-style-type: none"> *Factorizations *Divisibility *Fractions and Fraction Notation *Multiplication and Applications *Simplifying *Multiplying, Simplifying, and Applications *Division and Applications 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 2: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL</p>	<p>*1, 7 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			<p>Homework Chapter 2: Complete the Chapter 2 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.</p>	
7-9	3- Fraction Notation and Mixed Numerals	<ul style="list-style-type: none"> *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 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 3: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities:</p>	<p>*1, 7 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			<p>Questions, Lecture, Class Quizzes, Class Work, Tests, etc... (Cumulative Test 1-3 in class)</p> <p>MathXL Homework Chapter 3: Complete the Chapter 3 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.</p>	
10-12	4 - Decimals	<ul style="list-style-type: none"> *Decimal Notation; Order; Rounding *Addition and Subtraction Multiplication *Division *Converting: Fraction to Decimal *Estimating *Applications and Problem Solving 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 4: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed.</p>	<p>*2, 7 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			<p>Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL Homework Chapter 4: Complete the Chapter 4 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.</p>	
13-17	<p>5 - Ratio and Proportion</p> <p>Start Using a Calculator but show all steps that lead to calculator use to get credit.</p>	<ul style="list-style-type: none"> *Introduction to Ratios *Rates and Unit Prices *Proportions *Application of Proportions *Geometric Applications 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 5: quizzes, tests, study plan options, lecture videos, and tutorials associated with</p>	<p>*3,6,7 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			<p>each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL Homework Chapter 5: Complete the Chapter 5 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.</p>	
18-21	6 - Percent Notation	<p>*Percent Notation *Percent and Fraction Notation *Solving Percents: Percent Equation</p>	<p>40% Hybrid Activities: Complete the MathXL assignments for</p>	<p>*3,4,7 **a,b,c</p>

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
		<p>*Solving Percents: Percent Proportion *Percent Applications *Sales Tax, Commission, Discount</p>	<p>Chapter 6: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc... (Cumulative Test 4-6 in class)</p> <p>MathXL Homework Chapter 6: Complete the Chapter 6 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in</p>	

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			order to satisfy the expectations of the course.	
22-23	7 - Data, Graphs, and Statistics	<ul style="list-style-type: none"> *Average, Median, and Modes *Tables and Pictographs *Bar Graphs and Line Graphs *Circle Graphs 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 7: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL Homework Chapter 7: Complete the Chapter 7 Homework found under the Homework and Tests Button.</p> <p>ADDITIONAL: Your instructor will detail how and when all work is</p>	*1, 2, 3, 4,6, 7, 8 **a,b,c

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course	
24-29	8 - Measurement	<ul style="list-style-type: none"> *Linear Measures: American Units *Linear Measures: Metric Units *Converting between American/Metric *Weight and Mass: Medical Apps *Capacity: Medical Apps *Time and Temperature *Converting Units of Area **A Three Conversions Methods Quiz will be given. 	<p>40% Hybrid Activities: Complete the MathXL assignments for Chapter 8: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items.</p> <p>60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc...</p> <p>MathXL Homework Chapter 8: Complete the Chapter 8 Homework found under the Homework and</p>	*1,2,3, 5, 7 **a,b,c

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			Tests Button. ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.	
30-34	9 - Geometry	*Perimeter *Area *Circles *Volume *Angles and Triangles *Square Roots and Pythagorean Theorem	40% Hybrid Activities: Complete the MathXL assignments for Chapter 9: quizzes, tests, study plan options, lecture videos, and tutorials associated with each homework problem. MathXL records the grades, time spent and the dates completed. Students are required to spend a minimum of 90 minutes per week on these items. 60% Face to Face Activities: Questions, Lecture, Class Quizzes, Class Work, Tests, etc... (Cumulative Test 7-9 in class)	*6 **All

HOURS/MINUTES 37.5hrs=2250min	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
			MathXL Homework Chapter 9: Complete the Chapter 9 Homework found under the Homework and Tests Button. ADDITIONAL: Your instructor will detail how and when all work is due. Most students must complete 2+ hours per week online in MathXL and Blackboard in order to satisfy the expectations of the course.	
35 – 37.5		Final Exam Review Competency Exam Given	Competency Exam Given	*All **All
Total: 37.5 Instructional Hours				
		Final Exam		*All **All

COMPETENCY AREAS: (FROM STATE STANDARDS)

1. Fractions
2. Decimals
3. Ratios and Proportions
4. Percents
5. Measurement and Conversion
6. Geometric Concepts
7. Technical Applications
8. Basic Statistics

GENERAL CORE EDUCATIONAL COMPETENCIES

- 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.