

# Tentative Syllabus

## Mat 060

### Essential Mathematics

Instructor: \_\_\_\_\_

E-mail; \_\_\_\_\_

Office: \_\_\_\_\_

Office Hours: \_\_\_\_\_

Office Phone: \_\_\_\_\_

#### **COURSE DESCRIPTION**

This course is a comprehensive study of mathematical skills, which should provide students with 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 an introduction to algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate. *This course does not carry credit towards an associate degree.*

#### **COURSE OBJECTIVES**

At the completion of this course, the student should be able to model and solve application problems while learning to

1. Add, subtract, multiply, and divide fractions and decimals
2. Utilize the correct order of operations
3. Evaluate powers and roots
4. Convert between fractions, decimals, and percents
5. Express ratios and solve proportions
6. Solve percent problems using the percent equation or the proportion method
7. Use unit analysis within the U.S. system and the within the metric system
8. Describe and define lines, angles, and basic geometric figures
9. Calculate the perimeter, area and volume of basic geometric figures
10. Apply the Pythagorean Theorem
11. Add, subtract, multiply, and divide signed numbers
12. Solve simple linear equations in the form of  $ax + b = c$
13. Determine mean, median, and mode

14. Interpret basic statistical graphs
15. Use appropriate technology

## **ADDITIONAL OBJECTIVES**

In this course, students should develop the ability to:

1. Learn, read, write, listen, and speak mathematically.
2. Estimate reliably, formulate an answer, and judge the reasonableness of the results.

## **EVALUATION**

**This is a mastery-based course. You must show mastery of a concept by passing the mastery test with an appropriate score of 80 or better. Since most tests are cumulative (in other words, each test contains material on the recently taught skill as well as previously taught skills), you must pass one test before you can take the next test. You will, however, be required to complete appropriate intervention before you can retest. If necessary, you will be given four opportunities to pass a particular test. After four tries, no further tests will be given and you may want to consider withdrawing from the course since you are not making progress. If you satisfactorily complete all mastery tests with a grade of 80 or better, you can take the final exam. The final exam will be comprehensive. You are not required to make a particular score on the final exam; however, the final exam will be a part of your average in the course. There will be no retest on the final exam. Grades will be computed as follows:**

Mastery Test	60%
Final Exam	30%
Lab & Quiz	10%

\*Students who are not making satisfactory progress toward mastery may be referred to the Academic Support Center (Room 1-115) and/or Student Support Services for additional skill building.

## **Mastery Tests**

Mastery tests will be cumulative. There will be questions on the new material just covered as well as previously covered material. Therefore, the student is responsible for the previously covered material without an in-class review of that material.

## **GRADING SCALE**

A = 90 – 100

B = 80 – 89

C = 70 – 79

IP = An *In Progress* grade is appropriate for students who meet the following criteria:

- Attend regularly.
- Complete interventions and take retests within the required time period.
- Hand in assignments on time.
- Complete appropriate assignments and tests by the last day to drop, but do not complete all assignments and tests after the last day to drop.
- Continue to make progress in the course after the last day to drop.  
(See daily syllabus for appropriate assignments, tests, and date of last day to drop.)

R = Students who do not have a C or higher average for the course must *reenroll*.

I = *Incompletes* are assigned when a student fails to complete the work for the course for unavoidable reasons, as determined by the instructor.

W = This grade is assigned when a student officially withdraws from the course by the last day to drop.

WF = This grade is assigned to students who stop attending but do not officially withdraw. A WF carries the same penalty as an F.

F = Students who do not meet the criteria for an IP will receive an F.

## **ATTENDANCE POLICY**

Students are expected to be in class on time and are expected to attend all classes. A student must attend a minimum of 90 percent of the total class hours in order to receive a passing grade. After missing eight (8) hours of class time, you may be dropped from the course. It is important that you communicate with your instructor concerning any absences. You are responsible for any material missed while you were out and should plan on making-up assignments as required by your instructor. Any work that is made up cannot be used to erase any absences on the part of the student.

Some sections of Mat 060 are web-enhanced, allowing you to access handouts and course assignments as required by your instructor.

**Students who cannot adhere to the attendance policy must officially withdraw from class(es) in Student Services to avoid a possible failing grade. (See BCCC Catalogue for withdrawal procedures.)**

## Personal Electronics Policy

All personal electronic devices (cell phones, iPods, Bluetooth, headsets, etc.) must be **turned off** and **put away** during class. If there is a compelling reason why you must have access to your cell phone or other device during class, you must obtain prior permission from the instructor. Students who disregard this policy may be asked to leave the classroom, and continued abuse of this policy may lead to being dropped from the class.

A policy for notifying students in the case of an emergency is included in the college catalog.

### Guidelines for Testing in the ASC

Students in developmental English, mathematics, and reading courses may take mastery tests and retests in the Academic Support Center at the discretion of their individual instructors. Individual instructors may have additional requirements for taking tests, but the following guidelines apply to all students taking tests in the ASC.

Students must have written permission from their instructors before taking a test.

Students must also know exactly which test or retest they need to take. Mr. Casey is not responsible for keeping track of which tests or retests each student needs.

Students must take the test in the main room of the ASC under the supervision of Mr. Casey or other instructors who assist in the ASC. The only exception is students who take a test under the supervision of a reading tutor; these students may take tests in 1-113.

All tests must be completed in one sitting. Students may not start a test, leave, and come back to complete the test.

Students are expected to sit alone. The desk or table should be clear of all materials except those allowed for the test. Mr. Casey may direct students to sit in a particular area for testing at the request of the student's instructor.

Testing in the ASC is a privilege. Any student who does not abide by the guidelines or who is suspected of or caught cheating may not be allowed to take tests in the ASC.

## TEXTBOOK AND REQUIRED MATERIALS

Lial, Salzman, Hestwood , Basic College Mathematics, 8th **edition**. Pearson, 2010

A basic hand-held calculator (A scientific calculator with a fraction button is recommended.)

A three ring binder. (notebook)

## CONTACT/CREDIT HOURS

Contact hours—5

Credit hours—4

Prerequisite—Placement Test Score

**RESOURCES: There is no charge for the use of any of these resources.**

**Special Populations** – BCCC complies with the Americans with Disabilities Act and Section 504. If you have a disability such as visual or hearing impairment or learning difficulties, please contact Joan Robson, Special Populations Coordinator, for information concerning assistance. She is located in Building 9 Room 927-B; her phone number is 940-6356.

**Academic Support Center** – Room 1-115, James Casey is the Coordinator for the Academic Support Center. He can assist you with computing needs and re-testing for any of your developmental classes. Also, math instructors will be available in the Academic Support Center at certain hours each day. Hours are posted by the door of the Academic Support Center.

**Reading Tutors** – Tutoring for Reading is located in Room 1-113. See your reading instructor if you need a tutor for Reading.

**Counselor** – Building 9 Room 921. Sue Brookshire can advise you if you have problems, personal or academic.

**Academic Tutoring** – Student Support Services on the ground floor of Building 5 has tutors for Math, English, Accounting, etc. Please contact Mrs. Kim Jackson or Dorothy Jordan in Building 9, Room 923 for more information on tutoring for anything other than reading.

**Video Tapes** – Video tapes for Math 060 are available for check out in the Library and Academic Support Center. These tapes contain detailed lessons on each section in your Math book.

**SMOKING POLICY; THIS IS A SMOKE FREE CAMPUS.**