

## **MAT 116 – Mathematics for General Education II**

**TEXT:** Mathematics A Practical Odyssey Broome Community College by Karl J. Johnson and Mowry

**PREREQUISITE:** MAT 115 **Mathematics for General Education I** or equivalent

**OBJECTIVES:** This course is the second course of a two-course sequence designed to satisfy the SUNY General Education Requirement at the baccalaureate level. It provides an interdisciplinary approach to quantitative literacy, critical thinking and the relevance of mathematics in society. Prescribed topics include the mathematics of saving and borrowing money, and functions (especially linear, quadratic, logarithmic, exponential and sine) as models for interpreting data. Symmetry and fractals, voting or graph theory will also be included. Computer technology will be used throughout the course to explore these concepts and to prepare a presentation on a related topic of the student's choosing. The SUNY GER in mathematics is satisfied only upon completion of both MAT 115 and MAT 116.

**COMPUTER COMPONENT:** In this course the computer will be used as a resource in many different ways. Prior experience with computers is not required. All of the information you will need in order to utilize the computer will be provided. If you have questions regarding the use of the computer at any time you should seek assistance. Be sure to take good notes and keep them in a place where you can find them quickly. There may be graded homework to be completed on-line from time to time.

**ATTENDANCE:** Attendance at every class is expected and, because of the grading policy, (see below), poor attendance is very likely to have a negative impact on your grade. There will be no opportunity to make up grades for activities missed due to absence from class. You are responsible for all material covered and any announcements made regardless of the reason for your absence. Be sure to learn the e-mail address of your instructor and use the e-mail to keep in touch and get assistance. You must check in with the instructor regarding assignments that are due during any absence.

**CLASSROOM CONDUCT:** Respect for the teaching /learning process is expected from every person in this class. That means all cell phones are turned off and no one engages in disruptions such as talking, moving around or leaving the room, unless these are required as part of a class activity initiated by the instructor. Everyone should be in class on time with all necessary materials and ready to participate fully. Cell phones must be silent during class. If there is an emergency situation that requires you to be accessible by phone, please speak to the instructor ahead of time and sit near the door so that in the event that you receive a call, the disruption to the class will be minimized.

**ACADEMIC INTEGRITY:** The student code of conduct will be enforced in this class. If anyone is caught cheating (actively or passively), the maximum allowable penalty will result. Your behaviors should not give anyone reason to suspect that you are benefiting from the work of someone else in order to succeed in this course.

**ACADEMIC ACCOMMODATIONS:** Students with disabilities who may need accommodations in this class are strongly encouraged to notify the instructor with documentation from Student Support Services as soon as possible so that reasonable accommodations may be implemented.

**HOMEWORK:** Homework will be assigned, collected and graded on a regular basis. Some assignments may need to be done on the computer. Late assignments will not be accepted. There will be no makeup for missed homework.

**ACTIVITIES:** In class activities will be assigned, collected and graded on a regular basis. Many of the activities will be completed in a small group setting. Missed activities may not be made up.

**QUIZZES:** There will be quizzes given during the semester. They may be announced or unannounced. There will be no makeups for missed quizzes.

**EXAMS:** There will be three exams given during the semester. If an exam is missed for a valid reason, as determined by the instructor, then make-up arrangements can be made only if the instructor has been notified prior to the time of the exam.

**COMPREHENSIVE FINAL EXAM:** A comprehensive final exam will be given during the final exam period. Failure to take the final at the scheduled time will result in an "F" grade for the course.

**CALCULATOR:** A scientific calculator is required. I recommend a TI-30X. Calculators may not be shared during exams.

**GRADING:** The course grade is based on the following weighted criteria.

Homework / In-Class Activities-30%  
Quizzes-20%  
Exams-30%  
Comprehensive Final Exam-20%

**FINAL GRADE:** The percentages earned from the five items above will be totaled to determine the final grade for the course.

90%-100%    A range  
80%-89%    B range  
70%-79%    C range  
60%-69%    D range  
59% or less    F range

Pluses and minuses may be used for extremes of appropriate grade levels.

**COURSE OUTLINE and COURSE OBJECTIVES:** These items are on file in the Mathematics Department office and on the web at [http://web.sunybroome.edu/~mat\\_dept/courses.htm](http://web.sunybroome.edu/~mat_dept/courses.htm)