INSTRUCTOR: Professor Leslie Buck
COURSE: MAT142-22743 (MA88), Calculus with Analytic Geometry II
PREREQUISITE: MA141 (C or better)
TELEPHONE: 548-2628 - Department  
548-3583 - Office S223  
878-1337 - Home
EMAIL: buckl@sunysuffolk.edu
OFFICE HOURS: Monday 11:15 – 12:15 PM  
Tuesday 12:30 – 3:30 PM  
Wednesday 4:50 – 5:50 PM

OBJECTIVES: Upon successful completion of this course, students should be able to:

• Find antiderivatives by applying the following integration techniques: substitution (chain rule applications and trigonometric antiderivatives), integration by parts, trigonometric substitutions, and partial fractions.
• Apply calculus techniques to polar coordinate graphs; find the area of regions enclosed by polar curves.
• Apply L’Hopital’s rule to indeterminant forms.
• Determine the convergence or divergence of improper integrals and their applications.
• Determine the convergence/divergence of sequences, infinite series; find the interval of convergence of a power series.
• Use Taylor, Maclaurin, and binomial series to obtain power series representations of functions and to approximate function values.
• Find approximations to the definite integral using left sum, right sums, midpoint sums, the trapezoidal rule, and Simpson’s rule. Give appropriate bounds on the error of such approximations.
• Find the numerical value of the definite integral using technology.
• Use the above objectives in applications involving areas, volumes, arc length, and growth and decay models.
• Solve first order differential equations numerically (Euler’s method), graphically, and symbolically (variables separable only).

STUDENT REQUIREMENTS: In order to pass this course, the student must achieve a final average of at least 60%. Class attendance is essential. The student is responsible for all material taught or assigned by the professor. Absence is no excuse. The student is responsible for obtaining any assignments, notes, etc. from either the professor or a fellow classmate. Failure to do so is planning to fail.

Students are required to behave in accordance with the student code of conduct as outlined in the student handbook. An atmosphere of mutual respect will be maintained at all times in the classroom. Any student who is disruptive or violates proper classroom decorum (as outlined in the student handbook) will be asked to leave. Students who are repeatedly disruptive will be brought up on disciplinary charges. See Attendance Policy and Grading Procedures for more information on student requirements.

ATTENDANCE POLICY: This class begins at 12:30 PM and ends at 2:20 or 1:45 PM. Students are required to attend each class from beginning to end. It is disruptive to the learning environment if students are arriving late, leaving early or otherwise coming and going during class. This behavior will not be tolerated. Students with medical
conditions or other valid reasons for non-compliance with this policy must notify the professor immediately (documentation may be requested).

***THE LAST DATE FOR WITHDRAWAL IS MONDAY, 3/23/09***
NO WITHDRAWALS WILL BE GRANTED AFTER THIS DATE.

Exceptions to this rule will be made only for extenuating circumstances and at the discretion of the professor. The student is responsible to follow registrar procedure for withdrawal. Students who neglect to do so and stop attending will receive a grade of F. Students will not be automatically withdrawn for excessive absence.

*College make-up dates are built into the calendar. This semester they are Tuesday, May 19th and Wednesday, May 20th. Do not make plans for these days. If there is a college-wide closing, we will utilize them.*

**GRADING PROCEDURES:** There will be 3 in-class exams, 12 quizzes and a cumulative final examination.

The lowest of the 3 exam grades will be dropped. Therefore, no makeup exams will be given. In the event that a student misses more than one exam, that student will receive a zero for that grade. The final exam will not be dropped. Extenuating circumstances will be considered on a case-by-case basis and will require documentation.

There will be 12 quizzes given throughout the semester. Each quiz will consist of a homework problem assigned for the particular class in which the quiz is given. Students will have opportunity to ask questions concerning the assignment prior to the quiz. Quizzes will usually be announced during the class prior. The lowest 2 quiz grades will be dropped. Therefore, no makeup quizzes will be given. The sum of the quiz grades will equal an exam grade.

There will be 4 grades which count and the average of these grades will become your final average.

**NOTE:** Motivated students are encouraged to do extra credit assignments. Please let me know if you would like to improve your grade. Also, ample opportunity will be provided to earn class participation credit.

**TEXTBOOK:** Calculus: Concepts and Contexts, 3rd Edition, by James Stewart, Brooks/Cole

**CALCULATOR:** A graphing calculator is required. Those without a graphing calculator will be at a decided disadvantage throughout the course and on exams. The TI-84 graphing calculator is recommended and this calculator’s usage will be demonstrated during class.

Any ordinary business/scientific calculator or graphing utility will be acceptable for use during class and on exams except for the TI92 or any other calculator that performs symbolic manipulation. **USE OF ANY OTHER ELECTRONIC DEVICE IS PROHIBITED.** All cell phones, beepers, fax machines, etc. will be OFF and properly stowed at all times during class. Violation of this policy may be documented and used in an academic hearing.

**TENTATIVE EXAM DATES:**

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<th>Exam</th>
<th>Date</th>
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<tbody>
<tr>
<td>1</td>
<td>Monday 3/2</td>
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<td>2</td>
<td>Thursday 4/2</td>
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<td>3</td>
<td>Wednesday 5/13</td>
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<td>Final</td>
<td>Monday 5/18</td>
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*** Students should be aware of the Academic Skills Center in Orient 234 (x2594) where FREE tutoring and extra help is available. I will also make myself available to students for extra help outside of class on a 1:1 basis. Please call or speak with me to set up an appointment. No appointment is necessary if you wish to drop in during my office hours. I am happy to assist any student who wants to succeed. Please take advantage of the opportunities and resources available to you here.