MATH 1190: Calculus I

Fall Semester 2017

Instructor – Joel Fowler

<table>
<thead>
<tr>
<th>CRN</th>
<th>Days</th>
<th>Time</th>
<th>Course Num/Sec</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>82865</td>
<td>MWF</td>
<td>12:30 – 1:40</td>
<td>MATH 1190/61</td>
<td>Mathematics - 209</td>
</tr>
</tbody>
</table>

A Course in the General Education Program

Program Description: The General Education at Kennesaw State University program offers a comprehensive series of interrelated courses in the liberal arts and sciences for all Kennesaw State University students. Whereas the major program contributes depth within a chosen specialization, the General Education core provides breadth of understanding within a variety of disciplines. Together, the General Education core and the major degree program offer students the knowledge, skills, and perspectives to become informed and engaged citizens living in a diverse, global community.
Program Goals: The General Education Program at KSU has four goals. During the course of the program, students should achieve the following:

- Demonstrate knowledge and understanding of general education disciplines.
- Demonstrate proficiency in communication.
- Demonstrate skills in inquiry, critical thinking, analysis, and problem solving through scholarly and/or creative activity across the general education disciplines.
- Demonstrate an understanding of ethics, diversity, and a global perspective.

MATH 1190 satisfies one of Kennesaw State University’s general education program requirements. It addresses the Applied Math learning outcome. This learning outcome states:

Applied Math: Students will demonstrate an ability to effectively apply symbolic representations to model and solve problems.

For more information about KSU’s General Education program requirements and associated learning outcomes, please visit the topic "University-Wide Degree Requirements" in the KSU Undergraduate Catalog.

General Education Assessment Study:

Kennesaw State University is currently engaged in a campus-wide assessment of its general education program. The purpose is to measure student achievement with respect to faculty defined student learning outcomes. This course has been selected to participate in the process. No individually-identifiable student information will be collected as part of the assessment. Data will be reported only in aggregated form. Students should know that the data may be used for scholarly work by members of KSU faculty (but only in anonymous and aggregated form). If you are opposed to having your anonymous data used for scholarly work, you can “opt out” of this specific aspect of the process.

For more information on the general education assessment process and for access to an “opt out” form, please click

http://kennesaw.edu/curriculum/gen-ed-assessment.html
Course Description:

MATH 1190 – Calculus I  
4 Class Hours 0 Laboratory Hours 4 Credit Hours

Prerequisite: A grade of “C” or better grade in MATH 1112 or MATH 1113 or approval of department chair.

This course is the first in the calculus curriculum and introduces the central concepts of calculus. Topics include limits, continuity, derivatives of algebraic and transcendental functions of one variable, applications of these concepts and a brief introduction to the integral of a function.

Expected Learning Outcomes:

1. Appreciate the concepts of limit and be able to compute a variety of standard limits. They will be familiar with the concept of continuity and with the special properties of functions that are continuous on intervals.
2. Use the definition of a derivative to derive some of the basic rules for differentiation of algebraic, trigonometric and exponential functions and will be able to compute derivatives using these rules.
3. Understand the mean value theorem and its applications and will be able to apply derivatives to a variety of problems and situations.
4. Evaluate limits of indeterminate forms.
5. Understand the concept of an integral and its relationship to the area of regions between two graphs, and understand the fundamental theorem of calculus.
WITHDRAWAL FROM THE UNIVERSITY OR FROM INDIVIDUAL COURSES AND ACADEMIC INTEGRITY

Fall Term, 2017

Withdrawal

Students who find that they cannot continue in college for the entire semester after being enrolled, because of illness or any other reason, need to complete an online form. To completely or partially withdraw from classes at KSU, a student must withdraw online at www.kennesaw.edu, under Owl Express, Student Services.

The date the withdrawal is submitted online will be considered the official KSU withdrawal date which will be used in the calculation of any tuition refund or refund to Federal student aid and/or HOPE scholarship programs. It is advisable to print the final page of the withdrawal for your records. Withdrawals submitted online prior to midnight on the last day to withdraw without academic penalty will receive a “W” grade. Withdrawals after midnight will receive a “WF”. Failure to complete the online withdrawal process will produce no withdrawal from classes. Call the Registrar’s Office at 770-423-6200 during business hours if assistance is needed.

Students may, by means of the same online withdrawal and with the approval of the university Dean, withdraw from individual courses while retaining other courses on their schedules. This option may be exercised up until October 4, 2017.

This is the date to withdraw without academic penalty for Fall Term, 2017 classes. Failure to withdraw by the date above will mean that the student has elected to receive the final grade(s) earned in the course(s). The only exception to those withdrawal regulations will be for those instances that involve unusual and fully documented circumstances.

Academic Integrity

Every KSU student is responsible for upholding the provisions of the Statement of Student Rights and Responsibilities, as published in the Undergraduate and Graduate Catalogs. Section II of the Statement of Student Rights and Responsibilities addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the Department of Student Conduct and Academic Integrity (SCAI), which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimal one semester suspension requirement.
INSTRUCTOR INFORMATION:  Dr. Joel Fowler: D - 201; Hours: MWF 9:15 AM - 10:55 AM, or by appointment; (470)578-7414; jfowle60@kennesaw.edu


CALCULATOR POLICY:  TI models 83/84 are required for portions of the course.  No other calculator may be used.

GRADING:  Your average will be composed of the following:

- Highest 4 scores from in-class hour tests and quiz average........... 20% each
- Comprehensive final exam........................................................20%

TESTS:  Tests will be given on the following days, covering the indicated sections in the textbook.

- **Test 1:** Friday, Sept. 8, on 1.1 – 1.5, 2.1, 2.2
- **Test 2:** Friday, Sept. 29, on 2.3 – 2.5, 3.1, 3.2
- **Test 3:** Friday, Oct. 27, on 3.3, 4.1 – 4.6
- **Test 4:** Friday, Dec. 1, on 4.7, 4.8, 5.1 – 5.6

No early or make up tests will be given for any reason.  A student missing one test will have that zero score replaced by their quiz average, via the test score drop policy described in QUizzes below.  A student missing a second test will have the first zero score replaced by their quiz average, via the test score drop policy described in QUizzes below, and the second zero score replaced by their final exam score.  Additional missed tests will be recorded as zeros.

QUizzes:  Short unannounced quizzes will be given at the end of some classes.  There will be at least six.  Regardless of the number of quizzes, only the highest five of your quiz scores will be used to create your quiz average.  If your quiz average is higher than your lowest in-class test score it will replace it.  No early or make-up quizzes will be given.  Your quiz average cannot replace your final exam score.  There are no final exam exemptions.

HOMEWORK:  Homework assignments will be made in class.  Questions on it will be answered at the start of the next class.  It is your responsibility to do the homework.  It is the best method to learn the material and prepare for tests.

SCHEDULE:  Section numbers are from the textbook.  Class attendance is important.  Students are responsible for all material and course information presented in class.

<table>
<thead>
<tr>
<th>WEEK OF</th>
<th>TOPICS</th>
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<tbody>
<tr>
<td>Aug. 14</td>
<td>Sections 1.1, 1.2</td>
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<tr>
<td>Aug. 21</td>
<td>Sections 1.3, 1.4, 1.5</td>
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<tr>
<td>Aug. 28</td>
<td>Sections 2.1, 2.2</td>
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<tr>
<td>Sept. 4</td>
<td>(Mon. is Labor Day Holiday) <strong>TEST 1: FRIDAY SEPT. 8</strong></td>
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<tr>
<td>Sept. 11</td>
<td>Sections 2.3, 2.4</td>
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<tr>
<td>Sept. 18</td>
<td>Sections 2.5, 3.1</td>
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<tr>
<td>Sept. 25</td>
<td>Section 3.2 <strong>TEST 2: FRIDAY SEPT. 29</strong></td>
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<td>Oct. 2</td>
<td>Sections 3.3, 4.1</td>
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<td>Oct. 9</td>
<td>Sections 4.2, 4.3</td>
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<td>Oct. 16</td>
<td>Sections 4.4, 4.5</td>
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<td>Oct. 23</td>
<td>Section 4.6 <strong>TEST 3: FRIDAY OCT. 27</strong></td>
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<td>Oct. 30</td>
<td>Sections 4.7, 4.8</td>
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<td>Nov. 6</td>
<td>Sections 5.1, 5.2, 5.3</td>
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<tr>
<td>Nov. 13</td>
<td>Sections 5.4, 5.5, 5.6</td>
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<tr>
<td>Nov. 20</td>
<td>Nov. 20 - 24 is Fall Break</td>
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<tr>
<td>Nov. 27</td>
<td>Section 5.6 <strong>TEST 4: FRIDAY DEC. 1</strong></td>
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<td>Dec. 4</td>
<td>Section 8(Monday is the last day of classes)</td>
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Wed., Oct. 4, is the last day to withdraw with a grade of "W". Final exam: Mon. 12/11, 1:00 PM – 3:00 PM. All students are expected to abide by the KSU Student Conduct Code, which is posted at: https://web.kennesaw.edu/scal/content/ksu-student-code-conduct#Code%20of%20Academic%20Integrity

Students with disabilities who believe that they may need accommodations in this class should contact the Office of Student Disability Services (http://studentsuccess.kennesaw.edu/sds/) as soon as possible to better insure that such accommodations are implemented in a timely fashion.

A complete syllabus for this course may be found at: http://facultyweb.kennesaw.edu/jfowle60/syllabi.php
Kennesaw State University is committed to your success. To ensure that you take full advantage of your educational opportunities, the University is piloting an Early Alert/Early Intervention Program this semester and this course has been chosen for the pilot. In some cases, you will be contacted by your Academic Advisor as a follow-up on the instructor’s referral and to offer you the guidance and support you need. There are many ways for you to reach your academic and personal goals. We'll show you how.