

**MAT 265**

# Calculus I

**Spring 2014**

<b>Instructor:</b>	<b>Office:</b>
<b>SLN :</b>	<b>Time/Day:</b> MWF
<b>Telephone:</b>	<b>Hours:</b>
<b>Instructor Web Page:</b>	<b>E-mail:</b>
<b>Text:</b> <i>Essential Calculus, Early Transcendentals, 2<sup>nd</sup> Edition</i> , by James Stewart (Brooks/Cole)	

## Tentative Lecture and Test Schedule

Week	Section	Concepts/Comments
1/13-1/17	1.3, 1.4	Introduction, Functions; Limits: Numerically, One-Sided, Algebraically
1/20-1/24	1.5, 1.6	<b>Holiday Mon. 1/20</b> Continuity; Limits involving Infinity, Asymptotes
1/27-1/31	2.1, 2.2	Derivatives and Rates of Change; Derivative as a Function
2/3-2/7	2.3, 2.4	Basic Derivative Formulas; Product Rule, Quotient Rule
2/10-2/14	2.5, 2.6	Chain Rule; Implicit Differentiation; <b>Test 1 F, 2/14;</b>
2/17-2/21	2.7, 2.8	Related Rates ; Linear Approximation, Differentials
2/24-2/28	3.1, 3.2	Exponential Functions; Inverse Functions and Logarithms
3/3-3/7	3.3, 3.5	Derivatives of Exponential and Logarithmic Functions, Inverse Trigonometric Functions
3/10-3/15		<b>Spring Break (Mon –Fri, 3/10 -3/15)</b>
3/17-3/21	3.7, 4.1	Indeterminate Forms and L'Hospital's Rule; Maximum and Minimum Values (Extrema);
3/24-3/28	4.2	<b>Test 2 W, 3/26</b> Mean Value Theorem; <b>10/31</b>
3/31-4/4	4.3, 4.4	<b>M #1 Tu 4/1</b> , Derivatives and the Shapes of Graphs ; Curve Sketching
4/7-4/11	4.5, 4.7	<b>M #2 Tu 4/8</b> Optimization Problems; Antiderivatives
4/14-4/18	5.1, 5.2	Areas and Distances, The Definite Integral
4/21-4/25	5.3	Riemann Sums; Evaluating Definite, <b>Test 3 F, 4/25</b>
4/28-5/2	5.4	The Fundamental Theorem of Calculus; Final exam review
5/5-5/10		<b>Final Exam: Tue, 5/6 from 7:10-9:00pm</b> ( room t.b.a.)

## Important Dates and Points Allocations

Testing Schedule				Grade Allocations		Min. % for Grades	
Test	Covering through	Date	Location	Tests*			
1	1.3-1.6, 2.1-2.3	2/14	Classroom	Homework & Quizzes	50%	A	90%
2	2.4-2.8, 3.1-3.3, 3.5, 3.7	3/26	Classroom	Final Exam	25%	B	80%
3	4.1-4.5, 4.7, 5.1, 5.2	4/25	Classroom	Total	25%	C	70%
M	Mastery of Differentiation	4/1, 4/8	Testing Center		100%	D	60%
				* No test will be dropped		E	< 60%

**Prerequisite:** MAT 170-Pre-calculus with grade C or better, or a passing score (67 or better) on the placement exam.

**Homework & Quizzes:** Homework will be collected and graded. Students may work together on homework, but each individual student is required to write-up and turn in their own work. **No late homework is accepted.** Students will also submit homework online through WeBWork. (Click on your instructor's name at <http://webwork.asu.edu>.) Students are also responsible for reading each section *before* it is taught in class. Quizzes are given at the discretion of the instructor and frequently reflect material that has recently been discussed in class.

**Exams:** There will be three midterm exams given during the semester. All exams will be taken in the classroom **on the dates indicated** on the given table. **Your calculator memory may be viewed during any exam and will be cleared if anything suspicious is written therein.** The Instructor has the right to regard any suspicious material in your calculator memory as cheating. Makeup exams are given at the discretion of the instructor and only in the case of verified medical or other emergency, which **must be documented**. The instructor must be **notified before the test is given**. Call the instructor or the Math Department Office (480-965-3951) and leave a message or directly notify your instructor.

**Mastery Test:** The mastery test assesses basic differentiation skills (including implicit differentiation) and will be administered after covering in class the section of the book on implicit differentiation. No calculators are allowed on the mastery test. A score of at least 85% on one of the two attempts will be considered mastery. Those who pass the exam (with at least 85%) on the first attempt receive a score of 100%. Those who do not receive an 85% on the first attempt will be allowed a second attempt. Those who pass the mastery test on the second attempt with a score of at least 85% will receive a score of 85%. Those who do not pass the mastery exam on the second attempt will receive 85% of the points earned on the best of the two attempts. The mastery test is weighted toward the final grade as 50% of a midterm exam. **The mastery tests will be taken outside of class in the testing center.**

**Math Testing Center:** The Mathematics Department Testing Center is in PSA 21 (basement). In order to be admitted to the Testing Center each student **must have** a valid ASU "**Sun Card**". The testing center is open 10:30am–8:30 pm. M-Th. Make sure you arrive **before** 6:30 p.m. M-Th. The Testing Center will not allow for late entry. Students should take exams as early as possible during the allotted time frame, as the center can get extremely busy.

**Final Exam: Tue, 5/6 from 7:10-9:00pm** Location: to be announced. The final exam is a comprehensive.

**Final Exam Make-up Policy:** The final exam schedule will be strictly followed. Except to resolve those situations described below, no changes may be made in this schedule without prior approval of the Dean of the college in which the course is offered. Under this schedule, if a conflict occurs, or a student has more than three exams on one day, the instructors may be consulted about an individual schedule adjustment. If necessary, the matter may be pursued further with the appropriate dean(s). This procedure applies to conflicts among any combination of Downtown Phoenix campus, Tempe campus, Polytechnic campus, West campus, and/or off campus class.

#### **Tutoring:**

- The Math Tutor Center (free of charge) in PSA 116 will be open the following hours:
  - 8:00 a.m. - 8:00 p.m. Monday through Thursday
  - 8:00 a.m. - 3:00 p.m. Friday
  - 1:00 p.m. - 6:00 p.m. Sunday
- The Mathematics Community Center (MC<sup>2</sup>) in PSA 303
  - Monday – Friday from 10:00 AM – 7:00 PM (no tutors after 4:00pm)
- The Engineering Tutor Center (free of charge) in ECF 100 will be open approximately the same hours Mon – Fri. as the Math Tutor Center.
- Many residence halls and the Memorial Union also offer evening or weekend free tutoring to all ASU students enrolled in math courses as part of the Student Success Centers.

Come in for help before it is too late, and several days before an exam day to strengthen your preparation. In order to be admitted to the Tutor Center each student must present their valid ASU Sun Card.

#### **Week In Review**

There are weekly review sessions where first 45 minutes a recap of key concepts and examples from the previous week will be covered. The second 45 minutes is Q&A. Instructors will inform you of the time and locations.

**Graphing Calculator:** A graphing calculator is required for this course. If you already have a graphing calculator, you may use it. Examples of highly recommended models are the TI-*n*spire & TI 83/84 or Casio 9850GB Plus.

Calculators that do symbolic algebra, such as the Casio FX2, Casio 9970Gs, TI-89, TI-92, or TI- nspire CAS **cannot** be used in class or during an exam.

### Spring Workshops for Graphing Calculator

The Spring workshops for Texas Instruments graphing calculators will be

Xxxxx

Xxxxx.

**ATTENDANCE:** Attendance is mandatory! Your instructor reserves the right to take attendance and to incorporate your attendance as part of your overall grade. For classes that meet two days a week, the maximum number of absences is four. For classes that meet three days a week, the maximum number of absences is six. Students who exceed the number of allowed absences will receive a grade of **EN**. Your instructor reserves the right to take attendance and to incorporate your attendance as part of your overall grade.

**Classroom behavior:** Under no circumstances should you allow your cell phone to ring during class. Any disruptive behavior, which includes ringing cell phones, listening to your mp3 player, text messaging, constant talking, eating food noisily, reading a newspaper will not be tolerated.

**Note:** This syllabus is tentative and should not be considered definitive. The instructor reserves the right to modify it (including the dates of the tests) to meet the needs of the class. It is the student responsibility to attend class regularly and to make note of any change. The Instructor also reserves the right to create class policies in regards to homework due date, late assignments, etc.

#### Homework Problems

SECTION	PROBLEMS FROM TEXTBOOK
1.3	5, 6, 12, 14, 15, 22
1.4	1, 2, 9, 12, 15, 18, 19, 22, 25, 34, 35, 43, 44
1.5	4, 15, 16, 17, 20, 23, 29, 33, 39, 42
1.6	2, 10, 13, 15, 16, 19, 21, 25, 35, 40
2.1	3, 5, 8, 9, 12, 21, 25, 27, 32, 34
2.2	3, 12, 20, 23, 25, 34, 36, 43
2.3	1-26 even, 30, 34, 38, 42, 44, 45, 50, 53
2.4	3-26 odd, 27, 30, 34, 35, 38, 39, 43, 46
2.5	6, 7-33 odd, 35, 40, 43, 48, 51, 53, 55, 57
2.6	1, 4-16 even, 20, 24, 26, 28
2.7	2, 7, 11, 12, 14, 15, 27, 38
2.8	11, 13, 17, 22, 24,
3.1	15, 16, 24, 25, 29
3.2	22, 25, 28, 32, 34, 38, 39, 74
3.3	1-39 odd, 43, 46, 54, 55, 57, 58, 62, 63, 64
3.5	13, 15, 16, 19, 21, 23, 25, 27, 32, 34, 37, 38
3.7	1, 4, 5, 6, 10, 12, 13, 25, 28, 30, 35, 37, 38
4.1	3, 6, 9, 25, 31, 33, 35, 39, 49
4.2	3, 5, 9, 11, 15, 19
4.3	3, 5, 10, 16, 26, 31, 33
4.4	5, 9, 17, 29, 39
4.5	3, 7, 9, 11, 23, 25
4.7	1, 4, 6, 7, 8, 9, 12, 14, 17, 23, 27, 31, 34, 41
5.1	1, 4, 5, 9, 13
5.2	3, 7, 10, 11, 17, 25, 30, 33, 36, 41
5.3	1, 3, 5, 7, 9, 11, 13, 15, 17, 21, 23, 25, 27, 29, 37, 40, 42, 45, 48
5.4	1, 4, 7, 9, 13, 16

*(Homework problems may be added or deleted at the instructor's discretion)*

## The School of Mathematical and Statistical Sciences Policies and Procedures

Course Withdrawal Deadline	April 6th, 2014
Complete Withdrawal Deadline	May 2 <sup>nd</sup> , 2014

**Withdrawal:** A student may withdraw from a course with a grade of **W** during the withdrawal period. The instructor's signature is not required. A complete withdrawal must be done in person and that it involves withdrawing from all ASU classes, not just Math 265. Students will not be withdrawn if they merely stop coming to class. It is a student's responsibility to verify whether they have in fact withdrawn from a class.

**The grade of Incomplete:** A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work from completing a **small** percentage of the course requirements. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed.

**Instructor-Initiated Drop:** At the instructor's discretion, a student who has not attended any class during the first week of classes may be administratively dropped from the course. However, students should be aware that non-attendance will NOT automatically result in their being dropped from the course. Thus, a student should not assume they are no longer registered for a course simply because they did not attend class during the first week. It is the student's responsibility to be aware of their registration status.

**Final Exam Make-up Policy:** The final exam schedule listed in the Schedule of Classes will be strictly followed. Except to resolve those situations described below, no changes may be made in this schedule without prior approval of the Dean of the College of Liberal Arts and Sciences. Under this schedule, if a conflict occurs, or a student has more than three exams on one day, the instructors may be consulted about an individual schedule adjustment. If necessary, the matter may be pursued further with the appropriate dean(s). This procedure applies to conflicts among any combination of Downtown Phoenix campus, Tempe campus, Polytechnic campus, West campus, and/or off campus class. Make-up exams will NOT be given for reasons of a non-refundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

**Honor Policy:** *Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>.*

**Disability Accommodations:** If you have a disability that needs accommodating, please report this privately to the instructor **by the end of the first week of class**. You should also contact the Disability Resource Center at (480) 965 – 1234 (voice) or (480) 965 – 9000 (TTY). All efforts will be made to ensure you have equal opportunity to succeed in the course.