MAT 265 Syllabus

MAT 265: Calculus for Engineers I  Spring 2010 Syllabus

<table>
<thead>
<tr>
<th>SLN:</th>
<th>22793</th>
<th>22792</th>
<th>Instructor: Dr. Yun Kang</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place:</td>
<td>Poly SANCA 355</td>
<td>Poly SANCA 355</td>
<td>Office: WANNER Hall 340C</td>
</tr>
<tr>
<td>Time:</td>
<td>9:00-10:15 am (T Th)</td>
<td>1:30-2:45 pm (T Th)</td>
<td>Office Hours: 10:30am-1:15pm; 3:00-6:00pm (Tu and Th) or by appointments.</td>
</tr>
<tr>
<td>Phone:</td>
<td>480-727 – 5004 (office)</td>
<td>E-mail: <a href="mailto:yun.kang@asu.edu">yun.kang@asu.edu</a></td>
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**We will use blackboard for distributing course related information (e.g., homework, review for exams, group project, class notes)**

**General MAT 265 page address:** 
http://math.asu.edu/fym/courses/mat265/mat265.html

**Required Text:** Essential Calculus: Early Transcendentals by James Stewart.

**Prerequisites:** Students of MAT 265 are expected to complete MAT 117 (College Algebra) with a grade of A, B or C.

**Absences: Fall and Spring semesters:** For classes that meet three days a week (MWF, for example), the maximum number of allowed absences is six (6). For classes that meet two days a week, the maximum number is four (4). For classes that meet on other schedules, the number of absences allowed should reflect a similar ratio (two weeks worth of class meetings). **Students who exceed the number of allowed absences will receive a grade of EN.**

**Students Resources:**

**Tutor Center in Tempe:** The Math Tutor Center (free of charge) in PSA 116 will be open M-Th 8:00 a.m. - 6:00 p.m., Fri. 8:00 a.m. - 4:00 p.m., and Sun. 1:00 pm - 6:00 p.m. Phone: (480) 965-9072

**Math Tutor in Poly:** CNTR Building, Lower Level. Phone: (480) 727-1452

Come in for help before it is too late, and several days before an exam day to strengthen your preparation. Please schedule an appointment to see me during office hours if you have any questions, concerns, or if you have a disability that will require accommodations in this class.

**Note:** The ASU Polytechnic campus liaison to the Disability Resource Center is Garret Westlake, and he can respond to questions and facilitate academic support services and accommodations on campus. Contact Garret Westlake at (480) 727-1039 or Garret.Westlake@asu.edu.

**University Policies and Procedures**

| Course withdrawal (in person): | 04/09/10, Friday. |
| Course withdrawal (online): | 04/11/10, Sunday. |
| Complete withdrawal (in person and online): | 05/04/10, Tuesday. |
## LECTURE AND ASSIGNED PROBLEMS

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Sections</th>
<th>Homework Problems</th>
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</table>
| 1    | 1/18 – 1/22 | Martin Luther King Holiday (1/18) 1.1, 1.2 | **1.1:** 23,24,26,32,37,40,57,58  
**1.2:** 4,16,18,36,38,46,52 |
| 2    | 1/25 – 1/29 | 1.3 – 1.5                        | **1.3:** 3,6,8,12,14,15,21  
**1.4:** 1,2,8-24 every other even 27,28,32,36,38. |
| 3    | 2/1 – 2/5 | 1.5, 1.6                          | **1.5:** 3,4,6,10,13-16,19,23,27,28,30,35,38,40,42  
**1.6:** 2,10,12-30 every other even 33,34,38  
**Review:** 22-50 every other even (page 72) |
| 4    | 2/8 – 2/12 | 2.1- 2.3                          | **2.1:** 4,8,9,14,19,23,30,32,36,47,48  
**2.2:** 3,4,14,20,28,35,36  
**2.3:** 2-26 every other even ,31,32,36,38,40,42,44,48,51 |
| 5    | 2/15 – 2/19 | 2.4, 2.5                        | **2.4:** 2-26 every other even,29,30,34,38,43  
**2.5:** 6-38 every other even,40,44,46,49,57,58,60,66,67 |
| 6    | 2/22 – 2/26 | 2.6, 2.7, 2.8                   | **2.6:** 2-14 even, 17,18,20, 24, 25,41  
**2.7:** 2,9,10,12,23,26,30,36 |
| 7    | 3/1 – 3/5 | 2.8, 3.1                          | **2.8:** 2,4,6,12,14,17-20,22,24  
**3.1:** 4,15,16,22-30 even |
| 8    | 3/8 – 3/12 | 3.1, 3.2, 3.3                    | **3.2:** 28,32,34,36,40,44,49,50,62,69-74  
**3.3:** 2-36 every other even,39,40,41,46-54 even,56,57,62 |
| 9    | 3/15 – 3/19 | Spring Break                     |  |
| 10   | 3/22 – 3/26 | 3.5, 3.7                          | **3.5:** 3,4,7,8,16-30 even,32,34,39  
**3.7:** 2-36 every other even,39,40,49 |
| 11   | 3/29 – 4/2 | 4.1, 4.2                          | **4.1:** 6,8,22-48 every other even,60,61  
**4.2:** 4,5,17,18,34 |
| 12   | 4/5 – 4/9 | 4.3 - 4.5                         | **4.3:** 2-10 even,14,22-42 every other even,46,51  
**4.4:** 2-44 every other even,48,50  
**4.5:** 2-10 even,12,16,19,22,24,32,34 |
| 13   | 4/12 – 4/16 | 4.7, Review and Test 2           | **4.7:** 2,3,4,6,8,10,12,16-28 even,34,36,38,43(optional)  
**5.1:** 1,3,4,8,12,13,14,16  
**5.2:** 2,3,5,6,8,10,12,14,16,26,30,32,42,46,47 |
| 14   | 4/19 – 4/23 | 5.1, 5.2, 5.3                     | **5.3:** 1-28,29,32,37,39,40,44,45,50,56,58  
**5.4:** 4-20 every other even .22,24 |
| 15   | 4/26 – 4/30 | 5.4 and Review                    | Optional group project #3 and its presentation |
| 16   | 5/3 – 5/7 | Review, 5/5 is reading day.       | Common final, 5/6 at 7:10pm – 9:00p |

**Course Policies:** Students are responsible for material covered in class whether or not it is in the text. Working regularly on assigned problems and attending class are essential to survival. Homework will be collected at the beginning of the class. No late HW will be accepted and no make-up quizzes will be given. Make-up exams are at the discretion of the instructor. In any case, no make-up exam will be given unless the student has notified the instructor before the test is given. Message may be left in the instructor's office (480-727-5004) or through email. You must make every reasonable effort to notify me before the exam is given and document your reason for missing the exam.
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Graphing Calculator: A graphing calculator is required for this course. TI 83 or TI 84 Plus is recommended. If you already have a graphing calculator, you may use it. Calculators with QWERTY keyboards or those 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.

Homework, Group projects and Quizzes

Your first homework assignment is to make an appointment with me in the first two weeks of this semester. We will meet about 5 mins. I will try to get to know about your mathematical background, your expectations/concerns about the courses, etc.

General Homework. Assignments will be due approximately weekly and will be assigned for every lecture. You are responsible for keeping track of assignments if you miss class. Homework will include practice problems from the text as well as more extended writing and problem solving. About 20% of course grade. Detailed guidelines for homework:

Homework will be assigned almost every class. I will provide guidance and feedback in several ways: I will take questions on specific problems at the beginning of each class (10 mins limitation); I will be happy to examine solutions you write up and provide oral or written feedback; and I will be happy to discuss homework during office hours or by appointments. Each Tuesday, I will collect homework and give the graded homework back to you in one week. It is extremely important that you keep up with the homework, which is really the heart of the course. The only way to learn this material is by doing; you must put in a lot of time concentrating on the concepts and techniques that will be flying at you in order to master them. This includes time spent staring at hard problems and maybe getting nowhere; time spent like this is NOT wasted. You must also read the text and your class notes in concentrated fashion, with pen and scratch paper at hand. You should probably plan to spend about 15 hours per week, preferably in several separate sessions, on these tasks. I strongly recommend you work together in groups but don't copy with each other (if your submitted homework has identical solutions as other students, then I will ask all of you to present your work in front of me. If you can not explain the work, then you will be considered as cheating and you are responsible for the consequences).

Group Projects: There are three projects for this course. First two projects are mandatory, which are related to homework and exams problems; The third one is optional (may be considered as extra credits), which is a project on applications of differentiations. For each project, students should do the presentation in front of the class and hand in the written work before the due dates. These projects serve two purposes: an alternative way of reviewing the coming exam; training students' team work skills, presentation skills and be able to judge other students' work. The first two group projects are 5% of course grade.

Quizzes: Short quizzes (5-10 mins) will be given at the discretion of the instructor ( it is possible that quizzes will be given at almost every lecture). This serves for two purposes: evaluate how you learn for each lecture and check your attendance of the class. There will be no makeup quizzes. You may drop your lowest quiz score. The rest will be averaged for about 5% of your course grade.

Exams: There will be two midterms and a final exam. Each midterm is 20% of course grade. The final is comprehensive and 30% of course grade. The tentative dates of exams are as follows:

<table>
<thead>
<tr>
<th>Exams</th>
<th>Dates</th>
<th>Sections Covered</th>
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<tbody>
<tr>
<td>Exam 1 (Wk 7)</td>
<td>03/04/10 (tentative)</td>
<td>Chapter 1 and 2</td>
</tr>
<tr>
<td>Exam 2 (Wk 13)</td>
<td>04/15/10(tentative)</td>
<td>Chapter 3 and 4</td>
</tr>
<tr>
<td>Final Exam</td>
<td>According to the ASU Finals Schedule</td>
<td>Cumulative, Includes Chapter 5</td>
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Final Exam: Comprehensive and will be given on Thursday, May 6th at 7:10pm – 9:00pm at a location that will be announced later.

Grading Scale and Criteria: A+ >95%,  A 90-95%,  B 80-89%,  C 65-79%,  D 64-55%,  E <55%.

<table>
<thead>
<tr>
<th>Point Allocation</th>
<th>Percentage</th>
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<tr>
<td>Two mid-term exams</td>
<td>20% X 2 = 40.00%</td>
</tr>
<tr>
<td>Final Exam will be comprehensive</td>
<td>30.00%</td>
</tr>
<tr>
<td>Homework, Quizzes, Group work, Attendance and Performance in class</td>
<td>30.00%</td>
</tr>
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Extra Credits: Extra credits can help you only if your final grade falls in the following intervals: [88,90), [78,80), [63,65),[53,55), i.e., the extra credits can push you up to a better grade when your original grade falls in the intervals mentioned above. Problems that can be considered as extra credits are at the discretion of the instructor. Extra credits may include doing the third project, solving the challenging questions proposed by the instructor, presenting the problems in the class, etc.

Academic Honesty: Anyone found cheating will not be permitted to withdraw and will receive a grade of XE for the course. Discussing solutions to homework problems with others is strongly encouraged, but submitting work as your own which is copied or paraphrased from someone else is not permitted. If you are doing things right, your written work will sometimes contain an idea from another source (person, book, other). When this happens, make sure that you have reflected on the idea so that you understand it for yourself. Then write the idea in your own words. Less than this will be considered cheating.

The grade of XE: A grade of XE is reserved for "failure for academic dishonesty." The XE grade may be petitioned after 1 year.

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 student must provide written documentation and be passing the class at the time to receive an Incomplete. Make-up final 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. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. The Dean of the student’s college must approve any exceptions to these rules.

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. If in my judgment you are disrupting class, I will ask you to leave and I may report you to the Dean of Students.

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.