MAT 270 Sample Syllabus

Instructor:

Office:

Recitation T.A.s :

Course Materials

- **Blackboard.** This is the home-base for the course for…
  - Announcements & Assignments
  - Text / Worksheet / Homework materials
  - Links to YouTube class videos
  - Grades

- **Text** The text for this course is free and online at [http://bit.ly/ThompsonCalc](http://bit.ly/ThompsonCalc)

- **Graphing Calculator, by PacificTech.** You will make intensive use of a computer program called *Graphing Calculator*. This will be provided for free and you will download it on your own laptop or home computer. This software has capabilities that are not available in hand-held graphing calculators. Go to Blackboard announcements for all the info to download the software.

- **Top Hat In-Class Questioning System.** Go to tophat.com and click on "Student Sign Up." You must have personal internet or text capability with you during every class to answer questions and get credit.

- **Access to printer.** You will occasionally need to hand in printed work. As such, you will need access to a printer.

Attendance

*Attendance is mandatory.* Class lectures and in-class activities will be an important part of the course. They will contain material that is unavailable in the textbook.

School of Mathematical and Statistical Sciences policy is that more than 8 absences in a course that meets 4 days per week will result in a grade of E for chronic absenteeism. Absences due to illness or family emergency will be dealt with per case. An excused absence based on illness must be documented by a physician's note saying that it was unadvisable that you attend class, or that you were incapable of attending class. A note saying simply that you came into his or her office is not sufficient. Absences due to family emergency must be documented by a responsible family member who also is willing to speak with me by phone.

*Punctuality is imperative.* Late arrival is disruptive to class and it is harmful to your progress in the course. Two unexcused tardies will be counted as one unexcused absence. An excused tardy is one for which I am alerted at least the day before.
Schedule of Topics and Exam Dates:

<table>
<thead>
<tr>
<th>Wk</th>
<th>Dates</th>
<th>Topics covered, Tests and Breaks dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan. 9-13</td>
<td>Large and Small Quantities; Introduction to Graphing Calculator</td>
</tr>
<tr>
<td>2</td>
<td>Jan. 16-20</td>
<td>Monday MLK DAY, No class Functions, Graphs, Constant Rate of Change</td>
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<tr>
<td>3</td>
<td>Jan. 23-27</td>
<td>Constant Rate of Change</td>
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<tr>
<td>4</td>
<td>Jan 30-Feb 3</td>
<td>Differentials &amp; Rate of Change at a Moment TEST #1 Wed Feb 1, 6:15-9 pm WXLR 21</td>
</tr>
<tr>
<td>5</td>
<td>Feb. 6-10</td>
<td>Accumulation and Rate Functions and their Graphs</td>
</tr>
<tr>
<td>6</td>
<td>Feb. 13-17</td>
<td>Approximate Rate of Change and Accumulation functions</td>
</tr>
<tr>
<td>7</td>
<td>Feb. 20-24</td>
<td>The Accumulation Function and Integral</td>
</tr>
<tr>
<td>8</td>
<td>Feb. 27-Mar 3</td>
<td>Integral; The Fundamental Theorem of Calculus; Intro to Reversing the Process TEST #2 Wed Mar 1, 6:15-9 pm WXLR 21</td>
</tr>
<tr>
<td>9</td>
<td>March 6-10</td>
<td>SPRING BREAK, No classes</td>
</tr>
<tr>
<td>10</td>
<td>March 13-17</td>
<td>Exact Rate of Change from Accumulation; Closed Form Representations of Exact Rate</td>
</tr>
<tr>
<td>11</td>
<td>March 20-24</td>
<td>Derivative Rules for Closed Form Representations of Rate of Change</td>
</tr>
<tr>
<td>12</td>
<td>March 27-31</td>
<td>Complex Derivatives; Intro to Graphs of Two Variables MASTERY ATTEMPT 1 Wed, March 29, 6:15-9 pm WXLR 21</td>
</tr>
<tr>
<td>13</td>
<td>April 3-7</td>
<td>Implicit Differentiation and Related Rates of Change MASTERY ATTEMPT 2 Wed, Apr 5, 6:15-9 pm WXLR 21</td>
</tr>
<tr>
<td>14</td>
<td>April 10-14</td>
<td>Sketching Graphs of Accumulation from Rate of Change; The Second Derivative</td>
</tr>
<tr>
<td>15</td>
<td>April 17-21</td>
<td>Optimization</td>
</tr>
<tr>
<td>16</td>
<td>April 24-28</td>
<td>Antiderivatives and The Fundamental Theorem of Calculus TEST #3 Wednesday, April 26, 6:15-9 pm WXLR 21</td>
</tr>
</tbody>
</table>

**Tuesday, May 2  **  FINAL EXAM Tuesday May 2nd, 7 pm  Location TBA

**Homework**

Written homework will be collected when due, and graded primarily for professional presentation and completeness. Good organization, showing all work, complete sentences, illustrative diagrams, and logical derivations are part of a homework assignment done well. Accuracy may be a small part of the grade. An assignment not submitted receives a 0 (zero). If you cannot attend class, scan your homework and email it to your TA before class begins.

Homework will be an important component of this course. Your effort to organize your work for a clear and coherent presentation leads naturally to deeper, more readily accessible understandings of the ideas. An attitude toward homework of "get the answer, write it, and circle it" contributes little to effective learning. The learning that results from this attitude is superficial, fragmented, and easily forgotten.

How you approach your homework assignments will determine how much you get out of them. You will be asked to present your reasoning clearly and coherently. My demand that you strive to do this is for your benefit. Please take it seriously that you write your homework well.
Quizzes

*Reading Questions* will be given at the beginning of lecture to make sure you have read the text before coming to class. These may be TopHat or written responses to turn in. **15-minute written quizzes** will be given in lecture periodically. They will be announced ahead of time, and be designed to check that you are staying current with the material. *Tophat questions* will be given every class, and could be given at any time during class.

Course Policies

- **Cell phones.** Turn your cell phone off before entering the classroom. *No cell phone use is permitted during class. For any reason.*
- **Web surfing, Twitter, Facebook, etc.** Many students take notes on their laptops. This use is acceptable and encouraged. You may also use your personal copy of Graphing Calculator during class. But any computer use other than these will force me, with great reluctance, to ask you to leave the classroom for the rest of that class meeting.

Participation

As reflected in the course evaluation categories, participation counts for part of your homework grade. I mean "participation" broadly -- listening, reflecting, asking questions, discussing are all forms of participation and will be highly valued.

One practice I value is listening to your classmates. As such, I often will ask specific people to comment on another student's question or comment. "I didn't hear what she said" is not acceptable. If you don't hear what someone says, ask him or her to speak up.

Grades

Grades weights are as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Written Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Lecture: Top Hat / Quizzes / Attendance</td>
<td>20%</td>
</tr>
<tr>
<td>Tests: Hour exams &amp; Mastery</td>
<td>45%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Recitation**</td>
<td>Penalty to course grade for absences</td>
</tr>
</tbody>
</table>

**You are allowed 1 free absence from recitation. After that, deduction will be as follows:**
- 2 absences, -1% to course grade
- 3 absences, -3% to course grade
- 4 absences, -6%

Course Letter Grades

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>≥ 97</td>
</tr>
<tr>
<td>A</td>
<td>90-96</td>
</tr>
<tr>
<td>A-</td>
<td>88-89</td>
</tr>
<tr>
<td>B+</td>
<td>86-87</td>
</tr>
<tr>
<td>B</td>
<td>80-85</td>
</tr>
<tr>
<td>B-</td>
<td>78-79</td>
</tr>
<tr>
<td>C+</td>
<td>76-77</td>
</tr>
<tr>
<td>C</td>
<td>70-75</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
</tr>
<tr>
<td>E</td>
<td>&lt; 60</td>
</tr>
</tbody>
</table>
Departmental and University Policies and Procedures

Course withdrawal deadline: Sunday, April 2
Complete withdrawal (In person): Friday, April 28

The grade of XE: A grade of XE is reserved for "failure for academic dishonesty." The grade goes on the student’s transcript; the student needs to petition to have it removed 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 guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and make up the final within one calendar year. The student must provide written documentation and be passing the class at the time to receive an Incomplete.

Instructor-Initiated Drop: At the instructor’s discretion, any student who has not attended class during the first week of classes may be administratively dropped from the course. However, students should be aware that non-attendance would NOT automatically result in 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 ([http://students.asu.edu/final-exam-schedule](http://students.asu.edu/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. Make-up exams will NOT be given for reasons of 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 Dean of the student’s college must approve any exceptions to these rules.


Students are entitled to receive instruction free from interference by other members of the class. If a student is disruptive, an instructor may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in withdrawal from the course. An instructor may withdraw a student from a course when the student's behavior disrupts the educational process under USI 201-10 ([http://www.asu.edu/aad/manuals/usi/usi201-10.html](http://www.asu.edu/aad/manuals/usi/usi201-10.html)).

All internet-capable devices must be turned off and be made inaccessible during all exams. Anyone who access such a device during an exam for any reason will receive a score of 0 for that exam and possible further disciplinary measures. Use of cell phones is prohibited during class.

ACADEMIC HONESTY: Academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions and records. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism or facilitating such activities. 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](http://provost.asu.edu/academicintegrity).

DISABILITY ACCOMMODATIONS: Qualified students with disabilities who will require disability accommodations in this class are encouraged to make their request to me at the beginning of the semester either during office hours or by appointment. Note: Prior to receiving disability accommodations, verification of eligibility from Disability Resource center (DRC) is required. Disability information is confidential.

ESTABLISHING ELIGIBILITY for DISABILITY ACCOMMODATIONS: Students who feel they will need disability accommodations in this class but have not registered with the Disability Resource center (DRC) should contact DRC immediately. Their office is located on the first floor of the Matthews Center Building. DRC staff can also be reached at: (480)-965-1234 (Voice), (480)-965-9000 (TTY). Their hours are 8:00 AM to 5:00 PM Monday through Friday. For additional information visit: [www.asu.edu/studentaffairs/ed/drc](http://www.asu.edu/studentaffairs/ed/drc).