COURSE SYLLABUS

******************************************************************************
YEAR COURSE OFFERED: 2017 - 2018

SEMESTER COURSE OFFERED: Spring

DEPARTMENT: MATH

COURSE NUMBER: 1432 – 23979 and 24007

NAME OF COURSE: Calculus II

NAME OF INSTRUCTOR: Dr. Melahat Almus (http://www.math.uh.edu/~almus)

******************************************************************************

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

******************************************************************************

Learning Objectives

Upon successful completion of this course, students will understand and be able to apply the ideas of differential and integral calculus to any functions, polar coordinates and parametric curves. They will develop skill in techniques and further applications of integration. They will understand convergence of sequences and series and be able to test for convergence. They will understand and appreciate the importance of power series and Taylor polynomials. Students will be able to use graphical information and symbolic expression simultaneously in solving mathematical problems. They will be able to translate ordinary language descriptions of problems into mathematical expression, derive solutions by rigorous mathematical methods, interpret their results, and explain them.

Instructor Information

- Instructor: Dr. Melahat Almus
- Office: 212PGH
- Office Hours: MW12-1:30pm, F: 12-1pm.
- Email: almus@math.uh.edu

Required Reading

- The textbook, online quizzes, and additional help materials will be made available by logging into CourseWare at http://www.casa.uh.edu. The first portion of these materials are freely available for the first two weeks of class. All students must purchase a Course Access Code and enter it on CourseWare by the end of the second week of class to continue accessing the course learning materials. A Course Access Code must be purchased for approximately $55 from the University Bookstore. If you don’t enter the code by the deadline, you will temporarily lose your access to CASA. There are no make ups for the assignments missed during this no-access period.

******************************************************************************
COURSE SYLLABUS

Major Assignments/Exams

ASSESSMENTS
Test 1 - 5%
Tests 2, 3, 4 - 15% each
Final exam- 25%
Lab Quizzes – 5%
Homework (written and EMCF)– 7%
Online Quizzes - 10%
In-class Poppers and Attendance - 3%

Note: The percentage grade on the final exam (without any extra credit) can be used to replace your lowest test score (if it is better).

GRADING SCALE
If you call your average “x”:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93 ≤ x ≤ 100</td>
</tr>
<tr>
<td>A-</td>
<td>90 ≤ x &lt; 93</td>
</tr>
<tr>
<td>B+</td>
<td>87 ≤ x &lt; 90</td>
</tr>
<tr>
<td>B</td>
<td>83 ≤ x &lt; 87</td>
</tr>
<tr>
<td>B-</td>
<td>80 ≤ x &lt; 83</td>
</tr>
<tr>
<td>C+</td>
<td>77 ≤ x &lt; 80</td>
</tr>
<tr>
<td>C</td>
<td>73 ≤ x &lt; 77</td>
</tr>
<tr>
<td>C-</td>
<td>70 ≤ x &lt; 73</td>
</tr>
<tr>
<td>D+</td>
<td>67 ≤ x &lt; 70</td>
</tr>
<tr>
<td>D</td>
<td>63 ≤ x &lt; 67</td>
</tr>
<tr>
<td>D-</td>
<td>60 ≤ x &lt; 63</td>
</tr>
<tr>
<td>F</td>
<td>0 ≤ x &lt; 60</td>
</tr>
</tbody>
</table>

INSTRUCTIONS FOR ONLINE QUIZZES
• The quizzes are located in the CASA CourseWare course website under the “Online Assignments” tab.
• The quizzes will close on the due dates given on CourseWare at 11:59 pm and will not re-open.
• One of the lowest quizzes will be dropped.
• You have 20 times to take each quiz.
• There is a 60 minute time limit for each quiz.
• The following table shows what sections each quiz covers.
• All of the quizzes are open starting the first day of classes.
• No make ups on quizzes for any reason. Check the due dates from CASA.

<table>
<thead>
<tr>
<th>Quiz</th>
<th>Sections Covered</th>
<th>Quiz</th>
<th>Sections Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz 1</td>
<td>Integration review</td>
<td>Quiz 14</td>
<td>8.5</td>
</tr>
<tr>
<td>Quiz 2</td>
<td>7.2-7.3</td>
<td>Quiz 15</td>
<td>9.1</td>
</tr>
<tr>
<td>Quiz 3</td>
<td>7.3</td>
<td>Quiz 16</td>
<td>9.2</td>
</tr>
<tr>
<td>Quiz 4</td>
<td>7.4</td>
<td>Quiz 17</td>
<td>9.3</td>
</tr>
<tr>
<td>Quiz 5</td>
<td>7.4-7.5</td>
<td>Quiz 18</td>
<td>9.4-9.5</td>
</tr>
<tr>
<td>Quiz 6</td>
<td>7.5</td>
<td>Quiz 19</td>
<td>9.5</td>
</tr>
<tr>
<td>Quiz 7</td>
<td>Exponentials, Logs review</td>
<td>Quiz 20</td>
<td>9.6</td>
</tr>
<tr>
<td>Quiz 8</td>
<td>7.6</td>
<td>Quiz 21</td>
<td>9.7-9.8</td>
</tr>
<tr>
<td>Quiz 9</td>
<td>7.7</td>
<td>Quiz 22</td>
<td>10.1</td>
</tr>
<tr>
<td>Quiz 10</td>
<td>8.1</td>
<td>Quiz 23</td>
<td>10.2</td>
</tr>
<tr>
<td>Quiz 11</td>
<td>8.2</td>
<td>Quiz 24</td>
<td>10.3</td>
</tr>
<tr>
<td>Quiz 12</td>
<td>8.3</td>
<td>Quiz 25</td>
<td>10.4</td>
</tr>
<tr>
<td>Quiz 13</td>
<td>8.4</td>
<td>Quiz 26</td>
<td>10.5</td>
</tr>
</tbody>
</table>
**COURSE SYLLABUS**

**Poppers:** Daily grades will be given in lecture beginning the first day of the third week of class. You need to purchase a course packet of Popper Forms for Math 1432 with your section number from the BOOK STORE. You must bring one of these forms to class every day beginning week 3. No other form will be accepted. Questions will be asked in lecture at random times. You will mark your answers on your form and drop the form in a box at the end of class. Your forms will not be returned. If you are caught filling out multiple popper forms, you will lose attendance credit for that day.

If you turned in your scantron but did not get a grade for that popper: that means you have made a bubbling mistake on it and there’s nothing we can do about it. You will not get credit for it.

**Lab Quizzes:** 5% of your average will come from lab quizzes, which will be given during recitations beginning in week 2. Lab quiz grades are out of 10 points each. I will drop the one lowest lab quiz grade at the end of the semester.

**Homework:** 7% of your average will come from homework (written and EMCF). Written homework is submitted in recitation beginning week 2. "EMCF" stands for "Electronic Multiple Choice Form". EMCF assignments are answered on CourseWare using the EMCF tab. The EMCF assignment questions will be posted on the course calendar page on CourseWare at [http://www.casa.uh.edu](http://www.casa.uh.edu). Please see the course calendar page for more information. Homework grades are out of 10 points each. I will drop the lowest homework grade at the end of the semester.

**LATE ASSIGNMENT AND MAKE-UP POLICIES**

This course is a cumulative course. You as a student need to keep up with the reading, homework assignments and exams. **Thus late work or make-ups will not be accepted.**

**RECITATIONS (LABS)**

Any student who is registered for this course should also be registered for a lab section. You will not receive a separate grade for the lab section. The recitations are led by Teaching Assistants from the mathematics department. Record your TA’s name and email. Labs start on the first day of school (even if your lab is scheduled for a time before the lecture, it will start on the first day).

You will turn in written homework assignments, work on class work assignments and take written quizzes in your lab. Your TA will answer questions you bring to the lab.

**Attendance is mandatory.** Make sure you attend the lab section you are enrolled for in PeopleSoft. If you attend the wrong section, your grades may not be recorded in the system. Check your lab time and location in PeopleSoft.

**EXAM INFORMATION**

All sections of Math 1432 take common exams. Four regular exams will be given during the semester. The first exam is an online exam that will be available by the first day of class at [http://www.casa.uh.edu](http://www.casa.uh.edu). You have no more than two attempts for exam one. The other three exams will be given in CASA (note the test location when you register). You can access the scheduler for these exams by logging into CourseWare at [http://www.casa.uh.edu](http://www.casa.uh.edu). The scheduler will be available approximately 2 weeks prior to the start of the exam cycle.

**There are no make-ups for missed exams.** If you miss an exam, your final exam will replace that missed test. **If you miss more than one exam, final replaces the first missed exam.** Your final exam grade will replace your lowest test grade if it is higher.
COURSE SYLLABUS

- Exam schedule is given on the calendar at CASA.
- **Test 1 is online** and it covers pre-requisite material (Calculus 1). Take practice test 1 to see what to expect on Test 1.
- Tests 2-4 and the final will be given in CASA Testing Center, see the exam scheduler for details.
- The exams given in CASA will consist of both multiple choice and written questions.
- The multiple choice questions will be machine graded and the written questions (free response) will be graded by the instructors and teaching assistants.
- **CALCULATORS ARE NOT PERMITTED ON ANY OF THE EXAMS.**
- There will be a **practice test** on Courseware for each exam. 5% of your practice test score will be added to your exam score as bonus.

**Final Exam:** A comprehensive final exam will be given in CASA. All students must take the final exam in order to pass this course; no opt-out from the final. The final exam is **MANDATORY** for this class. No early/late finals; plan your trips accordingly. The final will include chapters 7 through 10.

**Exam Dates:** (Any changes will be announced on the calendar at CASA)

- Test 1 (online) 1/16-1/27
- Test 2 (50 minutes) 2/17-2/21
- Test 3 (50 min) 3/21-3/24
- Test 4 (50 min) 4/14-4/17
- Final Exam (110 min) 5/6-5/10

**Grade Appeals:** If you want to appeal your grade on the free response portion of an exam, contact your teaching assistant or instructor within 5 business days after the exam grades are posted. Any alterations on your answer sheet will be considered an academic honesty violation (see Honor Principle paragraph on this syllabus). Grade appeals on any assignments should be made within 5 business days of the posting of the assignment grade.

**Attendance is Mandatory!!** Attendance will be taken in lab, and the daily poppers will be used to determine your attendance in lecture. Attending the lectures and labs are important for your learning and success in this class; I strongly recommend that you do your best to attend both lectures and labs regularly.

**COMMUNICATION via EMAIL**

Your instructor will be sending class emails using PeopleSoft; you are responsible for checking your UH email. Per UH Policy, notices properly addressed and so sent (for example, via PeopleSoft) shall be presumed to have been received by the student. Thus, you are responsible for the content in emails sent to your UH account, regardless if your external (non-UH) email provider filters or blocks them. When emailing your instructor, it is recommended that you use a professional email address and include the course name on the subject line so that your instructor can address your questions accordingly. Please read this link for more on communication via email: [EMAIL ETIQUETTE](https://www.math.uh.edu/~tomforde/Email-Etiquette.html).

**HONOR PRINCIPLE**

University of Houston students are expected to adhere to the Academic Honesty Policy as described in the UH Undergraduate Catalog. “Academic dishonesty” means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or
COURSE SYLLABUS

by a course instructor to fulfill any and all academic requirements. Academic dishonesty includes, but is not limited to, the following: Plagiarism; Cheating and Unauthorized Group Work; Fabrication, Falsification, and Misrepresentation; Stealing and Abuse of Academic Materials; Complicity in Academic Dishonesty; Academic Misconduct. Refer to UH Academic Honesty website and the UH Student Catalog for the definition of these terms and university’s policy on Academic Dishonesty. Anyone caught cheating will be reported to the department for further disciplinary actions, receive sanctions as explained on these documents, and will have an academic dishonesty record at the Provosts office. The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include, but are not limited to: a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, or expulsion from the University of Houston, or a combination of these. Students may not receive a W for courses in which they have been found in violation of the Academic Honesty Policy. If a W is received prior to a finding of policy violation, the student will become liable for the Academic Honesty penalty, including F grades.

The instructor reserves the right to make changes on the syllabus. Any changes will be announced in class or on the course website. Check the calendar on CASA for the most up to date exam schedule and topics covered on each exam.

UH CAPS

Counseling and Psychological Services (CAPS) can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. No appointment is necessary for the "Let's Talk" program, a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html

CSD ACCOMMODATIONS

Academic Adjustments/Auxiliary Aids: The University of Houston System complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, pertaining to the provision of reasonable academic adjustments/auxiliary aids for students who have a disability. In accordance with Section 504 and ADA guidelines, University of Houston strives to provide reasonable academic adjustments/auxiliary aids to students who request and require them. If you believe that you have a disability requiring an academic adjustments/auxiliary aid, please visit The Center for Students with DisABILITIES (CSD) website at http://www.uh.edu/csd/ for more information.

Accommodation Forms: Students seeking academic adjustments/auxiliary aids must, in a timely manner (usually at the beginning of the semester), provide their instructor with a current Student Accommodation Form (SAF) from the CSD office before an approved accommodation can be implemented.

Details of this policy, and the corresponding responsibilities of the student are outlined in The Student Academic Adjustments/Auxiliary Aids Policy (01.D.09) document under [STEP 4: Student Submission (5.4.1 & 5.4.2), Page 6]. For more information please visit the Center for Students with Disabilities FAQs page.

Additionally, if a student is requesting a (CSD approved) testing accommodation, then the student will also complete a Request for Individualized Testing Accommodations (RITA) paper form to arrange for tests to be administered at the CSD office. CSD suggests that the student meet with their instructor during office hours and/or make an appointment to complete the RITA form to ensure confidentiality.

Students should bring a copy of their approved SAF form when meeting with the instructor to complete a RITA form.
COURSE SYLLABUS

*Note: RITA forms must be completed at least 48 hours in advance of the original test date. Please consult your counselor ahead of time to ensure that your tests are scheduled in a timely manner. Please keep in mind that if you run over the agreed upon time limit for your exam, you will be penalized in proportion to the amount of extra time taken. Please keep in mind that if you run over the allotted time indicated on your RITA form, then your exam score will be reduced 1 percentage point for each minute over.

List of discussion/lecture topics

Chapter 7 - Applications of Integration
  7.1 Integration Review
  7.2 Area
  7.3 Volume
  7.4 Centroids
  7.5 Arc Length and Surface Area
  7.6 Differential Equations and Exponential Growth/Decay
  7.7 Improper Integrals

Chapter 8 - Techniques of Integration
  8.1 Integration by Parts
  8.2 Powers of Trigonometric Functions
  8.3 Trigonometric Substitutions
  8.4 Integrating Rational Functions
  8.5 Numerical Integration

Chapter 9 - Sequences and Series
  9.1 Sequences and Convergence
  9.2 Numerical Series and Convergence
  9.3 Tests for Convergence
  9.4 The Power Series
  9.5 The Taylor Series

Chapter 10 - Polar Coordinates and Parametric Equations
  10.1 Polar Coordinates and Polar Curves
  10.2 Area and Arc Length in Polar Coordinates
  10.3 Parametric Equations
  10.4 Derivatives for Curves Given Parametrically
  10.5 Arc Length for Curves Given Parametrically
  10.6 Surface Area