Professor's Website: http://iws.collin.edu/vantohe
Professor's Name: Dr. Valeria Antohe
Office Loc: I-222
Email: vantohe@collin.edu
Campus: Spring Creek, Plano (SCC)
Phone: (972) 578-5515
Semester: 16-Week
Office: I-222
Fax: (972) 881-5619
Mailbox Loc: J-112
Course: Math-2414 Sec: WS1 CRN: 15585
Credit Hours: 4
Course Title: Calculus II
Lecture Hours: 3
Online Office Hours: TR 9:00-11:00 am
Lab Hours: 3
Office Hours: by appointment
Course Description:
Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Lab included.
Textbook and WebAssign Student Access Code:
Calculus - Early Transcendentals, 8th ed., by James Stewart, © 2016 Cengage Learning with Enhanced WebAssign Access Code; WebAssign student access code is required for online course work to receive credit. The WebAssign access code includes the text as an eBook. The Course Orientation document is posted in the WebAssign course.
Required Graphing Calculator: TI-83, TI-84, or non-CAS TI-Nspire; Supplies: Straightedge
WebAssign Registration Requirements
You must register in the WebAssign course (at https://www.webassign.net/) on of before the first day of the semester. The class key is collin 1555 9142.
Prerequisite(s): Math 2413 or TSI assessment
Census Date: September 11, 2017
Withdrawal Date: October 20, 2017
Final Exam Date: December 7-12, 2017
College Syllabus Link: http://www.collin.edu/math/math_syllabi.htm
Course Repeat Policy: Please see the “Repeating Courses” section of the Registration Guide for more information.
Course Delivery Method: Online videos
Course Requirements:
Completion of homework assignments, and labs, reading from the e-book, watching online videos, checking email and posted announcements, and during designated date ranges, taking three semester exams and a comprehensive final exam at Spring Creek testing center at Collin College. If you would like to take the regular exams at a different Collin campus you will need to arrange it by 5 pm on the Friday of the first week. All assignments and exams have due dates. It is the student responsibility to keep up with the required assignments and due dates. If you fall behind the schedule, you will not be given extensions. Do not send any email messages requesting extensions to various assignments. All class policies are applied evenly to all students and no exceptions will be granted.
College Wide Email System for Students: CougarMail
If you wish to communicate with me concerning grades, you need to use CougarMail. I cannot, for reasons of confidentiality and privacy, respond to messages on grades sent from e-mail accounts other than your CougarMail account. The e-mail messages you send me must have the following subject line: MATH 2414.WS1/ Last Name. Messages without this information will not be responded to.
Student Learning Outcomes: (Upon completion of this course, the students should be able to do the following)
1. Use the concepts of definite integrals to solve problems involving area, volume, work, and other physical applications. (Critical Thinking and Communication)
2. Use substitution, integration by parts, trigonometric substitution, partial fractions, and tables of anti-derivatives to evaluate definite and indefinite integrals.
3. Define an improper integral. (Communication)
4. Apply the concepts of limits, convergence, and divergence to evaluate some classes of improper integrals.
5. Determine convergence or divergence of sequences and series. (Critical Thinking)
6. Use Taylor and Maclaurin series to represent functions.
7. Use Taylor or Maclaurin series to integrate functions not integrable by conventional methods.

*If any link is not functional, copy and paste it in the browser.
8. Use the concept of polar coordinates to find areas, lengths of curves, and representations of conic sections.

**Method of Evaluation**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOMEWORK</td>
<td>10 %</td>
<td>33 assignments (done in WebAssign)</td>
</tr>
<tr>
<td>LABS</td>
<td>8 %</td>
<td>4 labs (done in WebAssign)</td>
</tr>
<tr>
<td>EXAM 1</td>
<td>19 %</td>
<td>covering chapter 7</td>
</tr>
<tr>
<td>EXAM 2</td>
<td>19 %</td>
<td>covering chapter 6, sections 8.1-8.3, 10.1, 10.4</td>
</tr>
<tr>
<td>EXAM 3</td>
<td>19 %</td>
<td>covering chapter sections 9.1-9.4, 11.1-11.7</td>
</tr>
<tr>
<td>FINAL EXAM</td>
<td>25 %</td>
<td>comprehensive, all sections above and 11.8-11.11</td>
</tr>
</tbody>
</table>

The formula to compute the final grade is:

\[ 0.57 \times \text{(Exam average)} + 0.1 \times \text{(HW average)} + 0.08 \times \text{(Lab average)} + 0.25 \times \text{(Final exam)} \]

The resulting number will be rounded to the closest whole number to get the grade. There is no extra credit in this class.

**Grading Scale:**

- A = 90-100
- B = 80-89
- C = 70-79
- D = 60-69
- F = 0-59

**Requirements for Participation in Online Discussion or Collaborative Activities:**
The purpose of the discussion board is to replicate asking and answering questions in the classroom. You may use the discussion board to interact with each other in a similar way to lecture classes. Participation in discussions is encouraged, but it is not required.

**Criteria Used to Evaluate Participation in Such Activities:**
There is no credit for participation in online discussion or collaborative activities.

**Delivery Method of Feedback and/or Graded Material:**
- Students will be able to view the numeric score they earn for each assignment, lab and exam in WebAssign.
- Students will receive posted grades for each lab assignment and exam within one week from the assignment due date.
- The lab solutions will be available and visible to the students immediately after the due date/time in WebAssign.
- Announcements on common errors and exam keys with full solutions will be posted in WebAssign after each exam is graded.
- Students may review their graded exam by requesting a scanned copy of their exam.

**Standards for Instructor Response and Availability:**
- For non-credit questions related to the course material use the discussion board from WebAssign course at [www.webassign.com](http://www.webassign.com).
- For administrative and personal questions, the preferred contact method is by email. Administrative questions asked Monday through Friday, 9 am-5 pm, will be answered within 24 hours. Questions asked Friday (after 5 pm) through Sunday will be answered the latest on Monday.

**Minimum Technology Requirement:**
Students must have access to high speed Internet. If you are experiencing slow download times, you may need a faster connection.

**System Requirements**
WebAssign is tested and supported for the systems/browsers listed at: [http://www.webassign.net/manual/student_guide/c_a_system_requirements.htm](http://www.webassign.net/manual/student_guide/c_a_system_requirements.htm)

**Minimum Student Skills:**
- scan documents and email attachments
- use the equation editor provided in the WebAssign course to show work
- upload/download documents
- simultaneously work on multiple browser windows
- to determine if the online format is appropriate for you, please take the survey: [http://iws.collin.edu/vantohe/Courses/CalculusIIOnline/IsOnlineCourseForYou.html](http://iws.collin.edu/vantohe/Courses/CalculusIIOnline/IsOnlineCourseForYou.html)
Netiquette Expectations:
1. Standards of courtesy and respect must be maintained at all times in our online “classroom.” Join in to the discussion, but remember that this is still a “classroom” setting and that respect and consideration are crucial for any intellectual discussion.
2. Discussion areas are the place for intelligent and respectful airing of ideas. Name-calling and personal attacks are not permitted.
3. Any violation of the standards of appropriate behavior online will be reported to the Dean of Students and appropriate disciplinary action will be taken by the college.

Attendance Policy:
No classroom lectures.

Homework Policy:
Each homework assignment will consist of problems taken from the WebAssign online software bundled with a new textbook. The lowest six homework grades are dropped to account for illness or other personal reasons. Each assignment score (max. 100) is recorded on its due date in the gradebook and cannot be turned in late nor made up for credit. It is the student’s responsibility to open and submit all the course assignments. The homework assignments will not be extended for any reasons. The homework assignment solutions will be available and visible to the students immediately after the due date/time.

Lab Policy:
The lab assignments will be given online. There will be no extension time for any labs. It is the student’s responsibility to open and submit all the course assignments. The lab assignments will not be extended for any reasons. The lab solutions will be available and visible to the students immediately after the due date/time. Directions for Labs are given in the Course Orientation document.

Exam Policy:
This class requires onsite proctored testing at Spring Creek testing center at Collin College or a testing center approved by the instructor on the dates listed in class calendar. If you would like to take the regular exams at a different Collin campus you will need to arrange it by 5 pm on the Friday of the first week. The Final Exam, which is cumulative and comprehensive, must be taken at the Spring Creek Campus Testing Center.

Exam requirements (All Students):
- All exams have to be proctored.
- Student identification card has to be presented at the beginning of each exam. The tests will not be issued without identification.
- The student is not allowed to use any notes or formula cards.
- The exams are not limited in time.

If you are NOT in the proximity of Collin College and cannot take your exams at a Collin College testing center, you will need to find a college or university in your area with a testing center that offers proctored testing. If there is a Testing Center at your current college/university, check if they provide this type of proctor services for distance courses.
After you identify a testing center that proctors exams according to the requirements presented below, you need to send the instructor the name and contact information (email and phone number) of the person in charge (Supervisor of the Testing center only) no later than 5 pm, on the Friday of the first week. This information should be verifiable using an official online directory posted by the college/university. It is not acceptable to send information that does not conform with this requirement.

Additional Exam requirements (If NOT taking the exam at Collin College testing centers):
- All exams should be taken at the same testing center.
- Students need to contact the testing center and arrange with the contact person the dates to take the exams within the periods listed in the course calendar.

Make-up Policy:
Make-up exams will not be given under any circumstances and a zero grade will be assigned to every missed exam. Your final exam grade will substitute the grade of one missed exam. If you did not miss any exams and your final exam is higher than one of the three exams, the lowest grade exam will be replaced by the final exam grade. All class policies are applied evenly to all students and no exceptions will be made.
Resource Material:
Any student enrolled in this class has access to the Math Lab (locations given below). The Lab is staffed with faculty and tutors; in addition, it offers free tutorial help, graphing calculators, and computer assistance. Collin students may arrange for tutoring with the ACCESS office (D140). Please call 972-881-5898 for scheduling and availability.

Math Lab:
Please note that tutors can answer only specific questions. Student solution manuals are available, if you do not want to purchase one. TI calculators are available for use in the lab.

<table>
<thead>
<tr>
<th>Campus</th>
<th>Math Lab</th>
<th>Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Creek</td>
<td>Math Lab</td>
<td>D203</td>
<td>972-881-5921</td>
</tr>
<tr>
<td>Preston Ridge</td>
<td>Math Lab</td>
<td>F148</td>
<td>972-377-1639</td>
</tr>
<tr>
<td>Central Park</td>
<td>Math Lab</td>
<td>C220</td>
<td>972-548-6896</td>
</tr>
</tbody>
</table>

Study Tips:
Schedule at least 12 hours a week to solve the assigned practice problems. Make the effort to complete all the assignments by their due dates. More study tips can be found at http://iws.collin.edu/vantohe/StudySkills.html

Withdrawal Policy:
Under section 51.907 of the Texas Education Code, students may not withdraw from more than six courses including any course a transfer student has withdrawn from at another Texas institute of higher education. For exemptions, visit http://www.collin.edu/gettingstarted/register/withdrawal.html. Please see your instructor before you withdraw and the current Collin Registration Guide for the last day to withdraw.

Course Withdrawal:
To withdraw from this class, you need to do the following:
1. Attain a Drop/Add form from the office of Admission and Records, 972-881-5710,
2. Turn in the completed Drop/Add form to the office of Admission and Records on or prior the withdrawal deadline,
3. Make sure your course withdrawal satisfies the college withdrawal policy,
4. You may receive an F if they do not finish this class and do not withdraw on or prior to the withdrawal deadline.

Religious Holy Days:
In accordance with section 51.911 of the Texas Education Code, the college will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time. Please refer to the current Collin Student Handbook.

Evaluation of Instructions:
Collin College seeks to improve the learning experience of all students. To assist in evaluating courses, students will be requested to complete an evaluation of instruction near the end of the semester.

Americans with Disabilities Act Statement:
Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current Collin Student Handbook for additional information.

Collin College Academic Policies:
See the current Collin Student Handbook.
Any incidence of scholastic dishonesty will be reported to the Dean of Student Development Office. Students who commit scholastic dishonesty—cheating on a test, plagiarism, collusion, or any other form of dishonesty—will receive a penalty ranging from an F on the assignment to an F in the course, at the discretion of the instructor.

Disclaimer:
The instructor reserves the right to make changes to this syllabus during the semester in writing.
### Tentative Course Calendar

**Online Calculus II**

Homework assignments for each section will be available on the first day of the semester. Homework assignments are due by 9 am as shown in the course calendar. Labs will be available on the first day of each unit. Unit Labs are due on Tuesday by 9 am as shown in the course calendar. Exams should be taken in the designated testing periods. The course material should be covered as shown in the course calendar.

<table>
<thead>
<tr>
<th>Wk.</th>
<th>Material</th>
<th>Due</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit 1</strong>&lt;br&gt;Aug. 28 - Sep. 15</td>
<td>7.1 Integration by parts &lt;br&gt;7.2. Trigonometric integrals &lt;br&gt;7.3. Trigonometric substitution</td>
<td>HW week 1 due 9/4</td>
</tr>
<tr>
<td></td>
<td>7.4 Integration of rational functions by partial fractions &lt;br&gt;7.5. Strategy for integration &lt;br&gt;7.6. Integral using tables</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>7.7 Approximate integration &lt;br&gt;7.8. Improper integrals</td>
<td>HW week 2 due 9/11&lt;br&gt;Lab 1 (7.1 - 7.6) due Tues. 9/12</td>
</tr>
<tr>
<td></td>
<td>Exam 1 in TC - prepare all sections in Unit 1; 9/14- 9/19 by 9 p.m; for 5 days</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6.1 Areas between curves &lt;br&gt;6.2. Volumes &lt;br&gt;6.3. Volumes by cylindrical shells</td>
<td>HW week 3 due 9/18</td>
</tr>
<tr>
<td></td>
<td>6.4 Work &lt;br&gt;6.5. Average value of a function</td>
<td>HW week 4 due 9/25</td>
</tr>
<tr>
<td></td>
<td>8.1 Arc length &lt;br&gt;8.2. Areas of a surface of revolution &lt;br&gt;8.3. Applications to Physics and Engineering</td>
<td>HW week 5 due 10/2</td>
</tr>
<tr>
<td></td>
<td>10.2 Calculus with parametric curves &lt;br&gt;10.4. Areas and lengths in polar coordinates</td>
<td>HW week 6 due 10/9&lt;br&gt;Lab 2 (6.1 - 6.5, 8.1 - 8.3) due Tues. 10/10</td>
</tr>
<tr>
<td></td>
<td>Exam 2 in TC - prepare all sections in Unit 2; 10/12-10/17 by 9 p.m.; for 5 days</td>
<td></td>
</tr>
<tr>
<td><strong>Unit 2</strong>&lt;br&gt;Sep 18 - Oct. 13</td>
<td>9.1. Modeling with differential equations &lt;br&gt;9.2. Direction fields and Euler's method &lt;br&gt;9.3. Separable equations</td>
<td>HW week 7 due 10/16</td>
</tr>
<tr>
<td>9</td>
<td>11.3. The integral test and estimates of sums &lt;br&gt;11.4. The Comparison tests &lt;br&gt;11.5. Alternating series</td>
<td>HW week 9 due 10/30</td>
</tr>
<tr>
<td></td>
<td>11.6. Absolute convergence and the ratio and root tests &lt;br&gt;11.7. Strategy for testing series</td>
<td>HW week 10 due 11/6&lt;br&gt;Lab 3 (9.1-9.4,11.1-11.5) due Tues. 11/07</td>
</tr>
<tr>
<td></td>
<td>Exam 3 in TC - prepare all sections in Unit 3; 11/9 - 11/14 by 9 p.m.; for 5 days</td>
<td></td>
</tr>
<tr>
<td><strong>Unit 3</strong>&lt;br&gt;Oct. 16 - Nov. 10</td>
<td>11.8. Power series &lt;br&gt;11.9. Representations of functions as power series</td>
<td>HW week 11 due 11/13</td>
</tr>
<tr>
<td></td>
<td>11.10. Taylor and Maclaurin series &lt;br&gt;11.11. Applications of Taylor polynomials</td>
<td>HW week 12 due 11/20</td>
</tr>
<tr>
<td>12</td>
<td>Review Unit 4</td>
<td>HW week 13 due 12/4</td>
</tr>
<tr>
<td><strong>Unit 4</strong>&lt;br&gt;Nov. 13 - Dec. 1</td>
<td>Review Final exam</td>
<td>Lab 4 (11.8-11.11) due Tues. 12/05</td>
</tr>
<tr>
<td></td>
<td>Final Exam in SCC testing center (all sections Unit 1-4); 12/7-12/12 by 9 p.m.; 5 days</td>
<td></td>
</tr>
</tbody>
</table>