



OFFICIAL TCC COURSE SYLLABUS Math 270

Discipline Prefix: MTH	Course Number: 270	Course Title: Applied Calculus	
Credit Hours: 3	Lecture Hours: 3	Clinical Hours: 0	Lab Hours: 0
Contact Hours: 3	Studio Hours: 0	Repeatable for Credit: Yes	
Semester: FALL 2013	Meeting Days/Time/Location: Online		

Instructor Information

Name: Dr. Julia Arnold

Office Location: Walker Bldg. Norfolk Campus; Room 3223

Office Hours: Face to face or online by appointment with 24 hours notice by email.

Contact Information: Email preferred; Office Phone: 757-822-1323; Home Phone: 757-539-2077

Course Website: <http://WWW.MYMATHLAB.COM>

Email address: jarnold@tcc.edu

Blackboard site: <http://learn.vccs.edu>

Academic Policies

Students are responsible for being aware of the policies, procedures, and student responsibilities contained within the current edition of the TCC *Catalog* and *Student Handbook*. Students should familiarize themselves with the college's policies regarding academic integrity, plagiarism, academic misconduct, and inclement weather found in the *Student Handbook*.

Student Handbook: <http://www.tcc.edu/forms/handbook/>

TCC *Catalog*: <http://www.tcc.edu/forms/catalog/>

Course Description

Applied Calculus (MTH 270) is designed for students in the fields of business, economics and some sciences. The course presents limits of functions, continuity of functions, differentiation of algebraic functions and transcendental functions with applications, and an introduction to integration of functions.

Prerequisites and/or Co-requisites

Pre-calculus I (MTH 163), Pre-calculus (MTH 166) or equivalent. It is recommended that all students take the math placement test to see if they are adequately prepared for this course. You must be able to use email, to use the internet to work with the course site and related sites, to print pages found on a web site and to download documents.

Required Course Texts and Supplementary Materials

A hard copy of your textbook is available if you want it. Otherwise you will have an e-book available on My Math Lab which you will also need to purchase. Please look into all options for the best deal. The text is: ***Calculus And Its Applications***; by Bittinger, Ellenbogen, and Surgent; 10th edition.

You will need to purchase an access number for My Math Lab by Pearson.

The url for MML is <http://www.mymathlab.com/> When you are prepared to register on MML, you will need the following information: A **valid email address** that you check regularly. (You can use the VCCS email account given to you upon registration.) A **Course ID #** which your Instructor will give you in your TCC Blackboard. The **access code** purchased from Pearson using a valid credit card or PayPal account, or you can purchase from the bookstore, Barnes & Noble at MacArthur Mall.

Graphing calculator (TI 83 or TI 84 recommended, you will need one) If you do not have a graphing calculator, a scientific calculator is minimum requirement.

Blackboard (you need to be able to log in and navigate)

Microsoft Office with Word, Excel, and Power Point are used by the instructor for communicating problems, grades and providing instruction. You will also need word to create your group assignment.

Alternative software is adobe acrobat or neatly written scanned files.

Computer with an Internet Connection. It is not recommended that you take this course if you do not have your own computer.

I recommend that you keep a 3-ring notebook to insert materials and keep your Syllabus and Weekly Schedule available as well as your HW and notes.

I highly recommend you download the 30 day free version of Math Type which converts to Math Type lite after 30 days. It is a math equation editor that is extremely useful and easy to use. Google Math Type.

This course requires the purchase of My Math Lab which correlates with the text book. My Math Lab provides videos, homework, quizzes, tests, and the final exam. There is an e-book available on My Math Lab if you prefer not to purchase a hard copy of the text. You should be familiar with a computer and be able to open email, download files as necessary, and should be able to view Microsoft Word, Excel, and or Power Point files.

Course Learning Outcomes

After the completion of this course, students will be able to:

1. perform algebraic operations with equations and functions,
2. be able to create and interpret information from graphs of equations and functions;
3. determine the limit of a function;
4. formally determine whether a function is continuous or not;
5. determine the derivative of a function;
6. use derivatives to sketch the graph of a function;
7. apply the derivative to optimization problems;
8. determine the derivative of exponential and logarithmic functions;
9. determine the indefinite and definite integrals of functions;
10. use the definite integral to determine area;
11. apply the definite integral to business problems;
12. recognize equations for which the partial derivative is appropriate.

Topics Covered in the Course

Functions, Graphs, and Models

Differentiation

Applications of Differentiation

Exponential and Logarithmic Functions

Integration

Applications of Integration

Functions of Several Variables

Description of Assignments/Assessments/Grading policies

For a grade of A you will need to earn 90-100%

For a grade of B you will need to earn 80-89%

For a grade of C you will need to earn 70-79%

For a grade of D you will need to earn 60-69%

Tests and Other Grades

10% Homework done online in MML

5% each Practice Tests for Test 1, Test 2, Test 3, and Test 4

30% 4 Tests: Test 1, Test 3, and Test 4 are online, 10% each done in MML

15% Proctored Test 2 in MML. Test 2 and the Final Exam are proctored. Failure to take both proctored exams will result in failure of the course regardless of other average. These tests are in MML.

5% Practice Final Exam in MML

20% Proctored Final exam in MML

Extra Credit: Use of Discussion Board for asking or answering math questions in the Math Q & A forum will give you 3 points added to Test 2. Discussion Board is in Blackboard. There will be a link on MML in the announcement page that will take you directly to Blackboard.

Course Schedule: See calendar Math 270 for suggested schedule.

Course Policies

You are responsible for checking your TCC email account daily and answering emails from your Instructor within 24 hours. You are also required to print and follow the weekly schedule provided under the Syllabus button in blackboard. Please report any discrepancies to your Instructor and ask questions if something is not clear.

Attendance in an online class consists of the following:

- ✓ Submitting required HW assignments
- ✓ Participation in the Discussion Board on the designated site which is Course Compass
- ✓ Keeping up to date with the weekly schedule
- ✓ Turning in required projects on time

- ✓ Taking the major tests on time
- ✓ **Coming to campus for two proctored tests***(See **EXCEPTIONS** below)
If you have not communicated via the avenues above and have a failing average you may be dropped from the course.

* **EXCEPTIONS:** Students who are at a great distance from campus (50+ miles) are responsible to find a proctored location where someone of authority can administer their test and give them access to a computer with an Internet connection. Possible places are other community colleges, or libraries. The name, email address, phone number, and title of the proctor must be given to the Instructor in plenty of time for arrangements to be made with the proctor. **Note: because of the number of emails I receive every day, please send me this information the week before the test week and no earlier.**

Failure to comply with the above items or communicate with your Instructor may mean your Instructor can drop you from the course.

2. Late Work/Make-up Exam Policy: Assignments (Video and Homework) should be done the week in which they are assigned. However, if you are ill and need a few days past the week they are due, that will be okay. You do not need to request an extension. You have one. Since the online tests are scheduled ahead of time you should do your best to stay on the schedule. If you have to be late a day or two that is acceptable. The only firm dates are Test 2 deadline, Final Exam deadline, and the due date for your Group Assignment.

Withdrawal Policy

Students who wish to withdraw without academic penalty should contact a counselor to determine the appropriate procedure and date. Withdrawals through completion of 60 percent of a session will result in a **W** grade. After 60 percent of a session is completed, a withdrawal will result in a grade of **F** in a credit course, except under mitigating circumstances that must be documented by the instructor and approved by the academic dean.

Important Dates

Important Dates

Aug. 22, 2013	First day of class
Aug. 29, 2013	Last day to drop or add a course
Sept. 9, 2013	Last day to drop to receive a tuition refund
Oct. 31, 2013	Last day to withdraw and receive a grade of W for the course
Dec. 16, 2012	Last Day of Course including Exams

Disability Services

Students who have documented, diagnosed disabilities, and who need special accommodations for tests, practical, etc., are advised to see the Disabilities Services staff in Student Services so that the instructor may be notified of what accommodations are appropriate in each case. Requests for accommodations should be made to the designated campus disability services counselor at least 45 days before classes begin. Documentation must be provided to support the need for accommodations.

For assistance with disabilities, contact the campus Disabilities Counselor/Provider or the Coordinator of Learning Disabilities Services: call 822-1213, visit Student Services/Development, or visit the Disability Services webpage at <http://www.tcc.edu/students/specialized/disabilityservices/index.htm>

Emergency Procedures

In the event of a bomb threat, tornado, or fire, students and staff may be asked to evacuate the building or move to a secure location within the building. Evacuation routes for movement to an external location or to a shelter within the building are posted at the front of the room. Students should review the maps and make sure that the exit route and assembly location for the building are clearly understood. If assistance is required during an evacuation, please let the instructor know at the end of the first class.

Tidewater Community College uses TCC Alerts to immediately contact and inform faculty, staff and students of a major crisis or emergency. TCC Alerts delivers important emergency alerts, notifications, and updates via: email account (work, home, other), cell phone, pager.

When an incident or emergency occurs, authorized senders will be instantly notified via TCC Alerts. TCC Alerts is a personal connection to real-time updates, instructions on where to go, what to do, or what not to do, who to contact, and other important information. New users may also register by sending a text message to **411911** keyword: **TIDEWATER**.

Academic Support Services

Each campus provides various kinds of academic assistance. One-on-one tutoring, math and computer labs, and other forms of individual and group assistance may be available. Find the math lab on your campus.

Important Websites

- College Website: www.tcc.edu
- Blackboard and Student E-mail: <https://tcc.my.vccs.edu/jsp/home.jsp>
- Student Handbook: <http://www.tcc.edu/forms/handbook/>
- TCC Catalog: <http://www.tcc.edu/forms/catalog/>
- Class Schedule: <http://www.tcc.edu/schedule/> (or log-in to SIS for current course offerings)
- Academic Calendar: <http://www.tcc.edu/students/calendar/academic/index.htm>
- Distance Learning Resources: <http://www.tcc.edu/students/dtls/>

Suggested Supplemental Homework in Text

No HW is assigned for chapter R but you can find problems in text book or on MML . There is no grade for Chapter R

- 1.1 1,7,9,11,15,17,21,23,25,29,31,33,37,41,43,49,53,55,61,63,65,69,73,75,77,81,85,87,89,
- 1.2 1,3,5,7,9,13,15,17,19,21,23,25,27,31,35,37,41,44,47,49,53,55,57,59,61,69,73,74
- 1.3 1,3,7,9,11,15,17,21,23,27,29,33,35,37,39,41,43,47,49,55
- 1.4 1,3,5,11,13,15,17,18,19,21,25,29,35,37,43,45,46,48,51,55,57
- 1.5 1,3,5,11,13,15,17,19,21,23,25,29,31,33,35,37,43,49,51,52,53,59,63,67,69,71,81,87,89,91,95,103,105,107,109,123
- 1.6 1,3,5,7,9,13,15,21,23,27,29,33,35,37,39,41,43,45,97,100,101,103,109,110,111,115,117,131
- 1.7 1,5,7,9,11,13,17,21,23,25,29,31,35,37,45,47,51,55,58,61,63,64,67,69,75,77,81,83,85,93,99,105

- 1.8 3,5,7,9,11,13,15,17,19,25,27,32,33,35,43,45,47,49,55,57,71,73
- 2.1 1,3,5,7,9,11,13,15,17,21,23,25,29,33,71,73,75,77,81,85,87,89,91,95,101,105
- 2.2 1,5,7,9,11,15,17,19,21,23,25,27,29,30,35,39,41,43,47,51,53,103,105,107,111,113,115,117,119,121,
- 2.3 1,3,9,11,13,15,17,19,21,25,27,29,31,33,35,41,43,49,53,57,63,65,67,68,69,75,79
- 2.4 3,5,7,9,11,15,17,19,21,23,27,29,31,33,37,49,51,55,57,61,63,65,67,75,79,83,85,107,111
- 2.5 1,3,5,7,9,13,15,17,19,23,29,31,33,37,39,41,43,49,51,55,57
- 2.6 1,3,5,7,11,13,17,19,23,25,29,31,37,39,41,43,47,49,55,57,61,63,65
- 2.7 3,5,7,9,11,15,17,19,23,25,31,33,37,39,41,43,45,47,51,57
- 3.1 1,7,11,17,19,23,25,27,29,31,33,35,39,43,45,47,75,77,81,83,87,89,91,93,101,103,106
- 3.2 1,5,9,11,15,19,23,25,31,35,37,41,43,47,49,51,53,55,57,59,61,63,65,67,69,71,73,77,79,83,86,88,89,93,99,101,103
- 3.3 1,3,7,9,13,15,27,35,51,53,55,57
- 3.4 1,3,7,9,41,43,45,47,49,51
- 3.5 1,3,5,7,13,17,21,25,29,31
- 4.1 1,5,9,13,17,21,27,31,35,41,47,57,59,61,65
- 4.2 1,3,7,13,19,23,25,27,29,31,35,37
- 4.3 1,3,5,7,9,11,13,15,25,37,49,55,59,65,73,77,79,85,93,103
- 4.4 1,5,11,15,19,21,25,29,33,39,41,43,45,49,53,57,69
- 5.1 1,5,9,13,14
- 6.1 1,3,5,7,19
- 6.2 3,5,7,9,11,41,45,51