

MATH227 16

STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Course : math227 **Title :** Calculus III

Length of Course : 16

Prerequisites : MATH226 **Credit Hours :** 3

Description

Course Description: This is the third course of a three part Calculus sequence. It is designed to extend the concepts learned in Calculus II to sequences and series (convergence tests, Taylor and MacLaurin Series, Power Series), differential equations (separable, homogeneous, growth and decay), parametric and polar equations (including slope and area), and vector Calculus (dot product, cross product, equations of lines and planes, vector functions, derivatives, velocity and acceleration). Pre-requisite: MATH226

Course Scope:

This course is presented online through a combination of the APUS and the THINKWELL websites. It uses a specially developed online text and workbook and is supplemented by video lectures covering each of the key mathematical skills needed to succeed in the course. The main objective of this third course is to introduce the concepts of series, differential equations, parametric and polar equations, and vector calculus. The course is organized into several distinct parts. The first part of the course introduces the basic concept and methods of series up to an analysis of alternating series whether they are classified as absolute or conditionally convergent. The second part of the course continues with power series and the Taylor Polynomial. This is followed by an introduction to elementary differential equation solutions along with applications of calculus to parametric and polar equation forms. Finally, vectors in \mathbb{R}^2 and \mathbb{R}^3 are examined with their operations along with appropriate calculus tools. Practical applications are emphasized throughout the course.

Objectives

After completing the course, the student should be able to accomplish these Learning Objectives (CO):

- CO-1. Use series to solve problems.
- CO-2. Prove convergence or divergence of series.
- CO-3. Approximate functions with an appropriate Taylor Polynomial.
- CO-4. Solve elementary differential equations.
- CO-5. Solve growth and decay problems using differential equations.
- CO-6. Use parametric equations to find arc length.
- CO-7. Use polar equations to find slopes and areas.

- CO-8. Analyze uses of dot and cross products.
 - CO-9. Find derivatives, velocity and acceleration of vector functions.
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Outline

Week 1: Review Sequences and Series

Learning Objective(s)

Course CO-1

1.1 Introduction

[Calculus I in 20 Minutes](#)

Understand the core principles from Calculus 1

2.1 Sequences

[The Limit of a Sequence](#)

Describe convergent and divergent sequences

[Determining the Limit of a Sequence](#)

Find the limit of a sequence ; Find the limit of a sequence using L'Hôpital's rule

[The Squeeze and Absolute Value Theorems](#)

Use the squeeze theorem to determine a limit; Use the absolute value theorem to determine a limit

2.2 Monotonic and Bounded Sequences

[Monotonic and Bounded Sequences](#)

Describe monotonic and bounded sequences

2.3 Infinite Series

[An Introduction to Infinite Series](#)

Explain and write infinite series

Reading and Videos

Section 1.1.2 with video: 1.1.2

Sections 2.1.1–2.1.3 with videos: 2.1.1, 2.1.2, 2.1.3

Section 2.2.1 with video: 2.2.1

Section 2.3.1 with video: 2.3.1

68 minutes of video time this week

Assignment(s)

Introduce yourself to your classmates in the Introduction Forum, minimum of 250 words

Read Class Orientation found in Lessons tab

Read Success in Class in Lessons tab

See the directions to view the Course Calendar in Lessons tab

Complete all problems in assigned sections of Thinkwell

These practice problems do not need to be turned in, but it is highly recommended that you complete and check them to insure your mastery of this first chapter.

Make a post or reply in APUS Forum Week 1 (02)

Week 2: Sequences and Series

Learning Objective(s)

Learning Objective(s)

Course CO-1, CO-2

2.3 Infinite Series

[The Summation of Infinite Series](#)

Evaluate an infinite series

[Geometric Series](#)

Evaluate a geometric series

[Telescoping Series](#)

Evaluate a telescoping series

2.4 Convergence and Divergence

[Properties of Convergent Series](#)

Describe the properties of convergent series; Explain the limit of the terms of a convergent infinite series

[The \$n\$ th-Term Test for Divergence](#)

Use the n th-term test to detect a divergent series

2.5 The Integral Test

[An Introduction to the Integral Test](#)

Explain the integral test for convergence of a series

Reading and Videos

Sections 2.3.2–2.3.4 with videos: 2.3.2, 2.3.3, 2.3.4

Sections 2.4.1–2.4.2 with videos: 2.4.1, 2.4.2

Section 2.5.1 with video 2.5.1

63 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Make a REQUIRED post or reply on Forum Week 2

Week 3: Sequences and Series

Learning Objective(s)

Course CO-1, CO-2

2.5 The Integral Test

[Examples of the Integral Test](#)

Apply the integral test to series

[Using the Integral Test](#)

Apply the integral test to series

[Defining p-Series](#)

Determine the convergence or divergence of p-series

2.6 The Direct Comparison Test

[An Introduction to the Direct Comparison Test](#)

Explain the direct comparison method for detecting convergence in series; Evaluate the convergence of series by direct comparison

[Using the Comparison Test](#)

Evaluate the convergence of series by direct comparison

2.7 The Limit Comparison Test

[An Introduction to the Limit Comparison Test](#)

Explain the limit comparison test for detecting convergence in series; Evaluate the convergence of series by the limit comparison test

Reading and Videos

Sections 2.5.2–2.5.4 with videos: 2.5.2, 2.5.3, 2.5.4

Sections 2.6.1–2.6.2 with videos: 2.6.1, 2.6.2

Section 2.7.1 with video Think

67 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Make a REQUIRED post or reply on Forum Week 3

Week 4: Sequences and Series

Learning Objective(s)

Course CO-1, CO-2

2.7 The Limit Comparison Test

[Using the Limit Comparison Test](#)

Evaluate the convergence of series by the limit comparison test

[Inverting the Series in the Limit Comparison Test](#)

Evaluate the convergence of series by inverting the series in the limit comparison test

2.8 The Alternating Series

[Alternating Series](#)

Explain the alternating series test for convergence

[The Alternating Series Test](#)

Apply the alternating series test

[Estimating the Sum of an Alternating Series](#)

Estimate the error of an approximate sum of an alternating series

2.9 Absolute and Conditional Convergences

[Absolute and Conditional Convergence](#)

Determine if an alternating series converges conditionally or absolutely

Reading and Videos

Sections 2.7.2–2.7.3 with videos: 2.7.2, 2.7.3

Sections 2.8.1–2.8.3 with videos: 2.8.1, 2.8.2, 2.8.3

Section 2.9.1 with video 2.9.1

63 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Test 1 on sections in Chapter 2.1- 2.8 covering from the Limit of a Sequence to Alternating Series

Make a post or reply on Forum Week 4

Week 5: Sequences and Series

Learning Objective(s)

Course CO-1, CO-2, CO-3

2.10 The Ratio and Root Tests

[The Ratio Test](#)

Apply the ratio test to determine convergence of a series

[Examples of the Ratio Test](#)

Apply the ratio test to determine convergence of a series; Apply the ratio test to series with factorials

[The Root Test](#)

Apply the n th root test for convergence to a series

2.11 Polynomial Approximations of Elementary Functions

[Polynomial Approximation of Elementary Functions](#)

Approximate a function with a tangent line

[Higher-Degree Approximations](#)

Find higher-order polynomial approximations of a function

2.12 Taylor and Maclaurin Polynomials

[Taylor Polynomials](#)

Find the Taylor polynomial for a function

Reading and Videos

Sections 2.10.1–2.10.3 with videos: 2.10.1, 2.10.2, 2.10.3

Sections 2.11.1–2.11.2 with videos: 2.11.1, 2.11.2

Section 2.12.1 with video 2.12.1

80 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 5

Submit assignment 02 if you have made at least one post for forum weeks 1-5.

Week 6:

Learning Objective(s)

Course CO-1, CO-3

2.12 Taylor and Maclaurin Polynomials

[Maclaurin Polynomials](#)

Find the Maclaurin polynomial for a function

[The Remainder of a Taylor Polynomial](#)

Find the remainder for a Taylor polynomial approximation of a function

[Approximating the Value of a Function](#)

Find the remainder for a Taylor polynomial approximation of a function

2.13 Taylor and Maclaurin Series

[Taylor Series](#)

Describe the Taylor series

[Examples of the Taylor and Maclaurin Series](#)

Find the Taylor series for a function

[New Taylor Series](#)

Find Taylor and Maclaurin series of composite functions

Reading and Videos

Sections 2.12.2 – 2.12.4 with videos: 2.12.2, 2.12.3, 2.12.4

Sections 2.13.1–2.13.3 with videos: 2.13.1, 2.13.2, 2.13.3

44 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 6

Week 7: Sequences and Series

Learning Objective(s)

Course CO-1, CO-2, CO-3

2.13 Taylor and Maclaurin Series

[The Convergence of Taylor Series](#)

Evaluate the convergence interval of a Taylor series

2.14 Power Series

[The Definition of Power Series](#)

Describe the power series

[The Interval and Radius of Convergence](#)

Define the interval and radius of convergence of a power series

[Finding the Interval and Radius of Convergence: Part One](#)

Find the interval and radius of convergence of a power series

[Finding the Interval and Radius of Convergence: Part Two](#)

Find the interval and radius of convergence of a power series

[Finding the Interval and Radius of Convergence: Part Three](#)

Find the interval and radius of convergence of a power series

Reading and Videos

Section 2.13.4 with video: 2.13.4

Sections 2.14.1–2.14.5 with videos: 2.14.1, 2.14.2, 2.14.3, 2.14.4, 2.14.5

67 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 7

Week 8: Sequences and Series

Learning Objective(s)

Course CO-1, CO-2, CO-3

2.15 Power Series Representations of Functions

[Differentiation and Integration of Power Series](#)

Write the derivative and integral of a power series

[Finding Power Series Representations by Differentiation](#)

Find new power series by differentiating a power series

[Finding Power Series Representations by Integration](#)

Find new power series by integrating a power series

[Integrating Functions Using Power Series](#)

Find integrals of functions by integrating their power series

3.2 Math Fun

[Fibonacci Numbers](#)

Describe the Fibonacci numbers

The Golden Ratio

Describe the golden ratio

Reading and Videos

Sections 2.15.1-2.15.4 with videos: 2.15.1, 2.15.2, 2.15.3, 2.15.4

Optional sections & videos 12.2.1, 12.2.2

24 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Test 2 on sections in Chapter 2.9-2.15 covering from Absolute Convergence to Power Series.

A review of 2.1-2.8 is also highly recommended as there is considerable overlap.

Post on Forum Week 8

Please skip those sections on Math Fun unless you have the time and want an extra challenge.

Week 9: Differential Equations

Learning Objective(s)

CO-4

4.1 Separable Differential Equations

[An Introduction to Differential Equations](#)

Describe a differential equation; Find solutions to differential equations

[Solving Separable Differential Equations](#)

Find solutions to separable differential equations

[Finding a Particular Solution](#)

Determine a particular solution for a separable differential equation

[Direction Fields](#)

Use the direction field method to analyze solution curves of differential equations; Use Euler's method to approximate a particular solution to a differential equation

4.2 Solving a Homogeneous Differential Equation

[Separating Homogeneous Differential Equations](#)

Define a homogeneous differential equation; Solve a homogeneous differential equation by separation

[Change of Variables](#)

Solve a homogeneous differential equation with a change of variables

Reading and Videos

Sections 4.1.1-4.1.4 with videos: 4.1.1, 4.1.2, 4.1.3, 4.1.4

Sections 4.2.1-4.2.2 with videos: 4.2.1, 4.2.2

51 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 9

Week 10: Differential Equations Parametric Equations and Polar Coordinates

Learning Objective(s)

CO-4, CO-5, CO-6

4.3 Growth and Decay Problems

[Exponential Growth](#)

Solve a differential equation describing exponential population growth

Exponential Decay

Solve a differential equation describing exponential decay

4.4 Solving First-Order Linear Differential Equations

[First-Order Linear Differential Equations](#)

Describe how to solve first-order linear differential equations with integrating factors

[Using Integrating Factors](#)

Solve first-order linear differential equations using integrating factors

5.1 Understanding Parametric Equations

[An Introduction to Parametric Equations](#)

Describe motion using parametric equations

[The Cycloid](#)

Explain the parametric equations describing the cycloid

[Eliminating Parameters](#)

Eliminate parameters through substitution

5.2 Calculus and Parametric Equations

[Derivatives of Parametric Equations](#)

Determine the domain and range of a parameter; Use the derivative of parametric equations to characterize curve shape

Reading and Videos

Sections 4.3.1-4.3.2 with videos: 4.3.1, 4.3.2

Optional sections & videos 4.4.1, 4.4.2

Sections 5.1.1-5.1.3 with videos: 5.1.1, 5.1.2, 5.1.3

Section 5.2.1 with video: 5.2.1

66 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 10

Please skip those sections on Solving First-Order Linear Differential Equations unless you have the time and want an extra challenge

Week 11: Parametric Equations and Polar Coordinates

Learning Objective(s)

CO-6, CO-7

5.2 Calculus and Parametric Equations

[Graphing the Elliptic Curve](#)

Sketch the curve of parametric equations by evaluating their derivatives

[The Arc Length of a Parameterized Curve](#)

Explain how to find arc length of parametric equations

[Finding Arc Lengths of Curves Given by Parametric Equations](#)

Find the arc length for a curve described by parametric equations

5.3 Understanding Polar Coordinates

[The Polar Coordinate System](#)

5.3 Understanding Polar Coordinates

[Converting between Polar and Cartesian Forms](#)

Convert Cartesian coordinates to polar coordinates; Convert polar coordinates to Cartesian coordinates

[Spirals and Circles](#)

Explain the graph of a spiral and a circle in polar coordinates

Reading and Videos

Sections 5.2.2-5.2.4 with videos: 5.2.2, 5.2.3, 5.2.4

Sections 5.3.1-5.3.3 with videos: 5.3.1, 5.3.2, 5.3.3

70 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 11

Week 12: Parametric Equations and Polar Coordinates

Learning Objective(s)

CO-7

5.3 Understanding Polar Coordinates

[Graphing Some Special Polar Functions](#)

Explain the graphs of rose curves, cardioids, limaçons, and lemniscates

5.4 Polar Functions and Slope

[Calculus and the Rose Curve](#)

Sketch a rose curve by evaluating its derivatives

[Finding the Slopes of Tangent Lines in Polar Form](#)

Find the slope of a tangent to a polar curve

5.5 Polar Functions and Area

[Heading toward the Area of a Polar Region](#)

Explain the integral for the area under a polar curve

[Finding the Area of a Polar Region: Part One](#)

Find the area under a polar curve

[Finding the Area of a Polar Region: Part Two](#)

Find the area under a polar curve

[The Area of a Region Bounded by Two Polar Curves: Part One](#)

Find the area bounded by two polar curves

[The Area of a Region Bounded by Two Polar Curves: Part Two](#)

Find the area bounded by two polar curves

Reading and Videos

Section 5.3.4 with video: 5.3.4

Sections 5.4.1-5.4.2 with videos: 5.4.1, 5.4.2

Sections 5.5.1-5.5.3 with videos: 5.5.1, 5.5.2, 5.5.3

Optional sections & videos 5.5.4, 5.5.5

65 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Test 3 on Chapter 4 Differential Equations and Chapter 5 Parametric Equations and Polar Coordinates

Post on Forum Week 12

Please skip those sections on The Area of a Region Bounded by Two Polar Curves: Parts One & Two unless you have the time and want an extra challenge

Week 13: Vectors and the Geometry of \mathbb{R}^2 and \mathbb{R}^3

Learning Objective(s)

Course CO-8, CO-9

6.1 Vectors and the Geometry of \mathbb{R}^2 and \mathbb{R}^3

[Coordinate Geometry in Three Dimensional Space](#)

Describe the three-dimensional coordinate system; Derive the three-dimensional distance formula; Describe the equation of a sphere

[Introduction to Vectors](#)

Define a vector; Explain vector operations

[Vectors in \$\mathbb{R}^2\$ and \$\mathbb{R}^3\$](#)

Calculate the length of a vector; Add, subtract, and multiply vectors; Express a vector as a linear combination of the standard basis vectors

[An Introduction to the Dot Product](#)

Explain the dot product of two vectors; Find the dot product of two vectors; Describe the properties of the dot product of two vectors

[Orthogonal Projections](#)

Describe the orthogonal projection of one vector onto another; Use the dot product to find scalar and vector projections

[An Introduction to the Cross Product](#)

Find the cross product of two vectors in three dimensions; Show that the cross product of two vectors is a vector orthogonal to the two vectors; Determine which direction the cross product of two vectors is pointing

Reading and Videos

Sections 6.1.1-6.1.6 with videos: 6.1.1, 6.1.2, 6.1.3, 6.1.4, 6.1.5, 6.1.6

95 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 13

Week 14: Vectors and the Geometry of \mathbb{R}^2 and \mathbb{R}^3

Learning Objective(s)

Course CO-8, CO-9

6.1 Vectors and the Geometry of \mathbb{R}^2 and \mathbb{R}^3

[Geometry of the Cross Product](#)

Describe the relationship between the cross product and the dot product; Find the area of a triangle using the cross product; Describe the properties of the cross product; Use the scalar triple product to find the volume of a parallelepiped

[Equations of Lines and Planes in \$\mathbb{R}^3\$](#)

Find the vector equation of a plane and the scalar equation of a plane; Find the vector equation of a line, the parametric equations of a line, and the symmetric equation of a line; Determine whether two given lines are parallel, intersecting, or skew

6.2 Vector Functions

Introduction to Vector Functions

Explain vector functions; Find the limit of a vector function; Sketch planar curves and space curves defined by vector functions

Derivatives of Vector Functions

Explain the definition of the derivative of a vector function; Find the derivative of a vector function; Find the tangent vector at a point on a tangent function; Sketch a planar curve using the derivative of a vector function

Vector Functions: Smooth Curves

Determine whether a space curve given by a vector function is smooth; Determine whether a planar curve given by a vector function is smooth

Vector Functions: Velocity and Acceleration

Use vector functions to represent position, velocity, and acceleration; Find and evaluate position, velocity, and acceleration vector functions

Reading and Videos

Sections 6.1.7-6.1.8 with videos: 6.1.7, 6.1.8

Sections 6.2.1-6.2.4 with videos: 6.2.1, 6.2.2, 6.2.3, 6.2.4

105 minutes of video time this week

Assignment(s)

Complete all problems in assigned sections of Thinkwell

Post on Forum Week 14

Week 15: Complete last test Course review

Learning Objective(s)

Complete test for Chapter 6

Review ALL course material and videos of troublesome topics to prepare for the final examination

Reading and Videos

844 minutes of video total time for entire course

Assignment(s)

Test 4 on Chapter 6 Vectors and the Geometry of \mathbb{R}^2 and \mathbb{R}^3

Post on Forum Week 15

Week 16: Final Examination

Learning Objective(s)

Demonstrate your knowledge of calculus

Assignment(s)

Turn-In Final Exam (09) (25points)

Last opportunity to Post on Forum Week 16

Evaluation

Staying on task and adhering to the published schedule are typically among the most challenging aspects of completing an academic course successfully. This is especially true for online and part-time non-resident programs. To avoid the pitfall of falling behind, students in this course should complete the assigned reading, and exercises in the Thinkwell environment. Students should also complete the Suggested Practice Problems as set forth in the schedule provided in the Course Outline of this syllabus.

Student grades for the course will be based on active weekly Forum entries, watching videos within Thinkwell environment, completing weekly assignments, four tests and one final examination. You must complete all items to successfully master all skills in this course.

The Week 1 Introduction Forum: During the first week of class each student must make a post to the Week 1 Introduction Forum. You are to use this Forum to introduce yourself and state your goals and objectives as they relate to our course. You are required to make a post to the Week 1 Introduction Forum in order to complete your enrollment in the course. Your post must be **at least 250 words**, and you must complete it by the end of the first week. This is a university requirement. To make a post to the Week 1 Introduction Forum, click on the Forum topic link, then click Post New Thread. In the title block of the dialog box that appears kindly insert your first and last name; compose your post in the message box; and then click Post Message.

Besides completing your enrollment in the course, the Week 1 Introduction Forum is designed to 1) build peer-to-peer relationships by introducing oneself and one's background to the class; 2) to articulate individual student learning goals and/or expectations for the class. Therefore, in your introduction you may wish to touch upon the following:

1. Who you are and how you would like to be addressed.
2. Your academic major or program of study.
3. Your current status in your program of study.
4. Your academic goals including why you are taking this course and what you hope to achieve by completing it.
5. Other information about yourself that you would like to share and might help others know you better.

The Chapter Tests: The chapter tests will cover part of a long chapter, or one or two chapters depending on their length as they are completed. These tests will be taken online in the classroom. They will be open book and open note tests. However, you may not receive help from any other person. These tests will be assigned early in the week and will be due by the end of the week. The exact dates are noted later in this student guide. These tests will represent 63 percent of the student's course grade.

There are practice exercises, some in Thinkwell and others in Sakai for each of the text chapters covered. These practice problems are focused on the reading and study material for each week. After completing your assigned reading and viewing the appropriate weekly videos, you should complete those problems in order to ensure you have mastered the material covered. They are not graded, but will be discussed through the weekly forums per student questions. If you do not feel that you have mastered the topics sufficiently, please feel free to explore additional problems which you can also introduce into our weekly forums. You can also post your solutions on a weekly forum for input from other students and me.

Weekly Forums: The weekly discussion forum is for students to answer my session topic and for students to post their questions on course content for that week. Successful students find that this is an excellent resource.

The Cumulative Final exam will be taken during the last week of the semester (24 points). It will be a three-hour exam. It will be open book and open notes and it will be online. It is highly recommended that you use a

calculator. Students are required to submit the precise 3 hour time block that they will take the final exam during the last week of class. This time and date should be submitted during the 7th week of the semester. Unless the professor approves alternate arrangements, students should plan to take the final examination during the 16th week of the course.

Students' final grades will be posted as soon as the instructor receives and evaluates the final exam. Official grades will continue to be issued by the University on the grade report form. Professors have 7 days from the end of the semester to submit their grades to the University.

Please see the [Student Handbook](#) to reference the University's [grading scale](#).

The points earned on the graded course assignments will determine the course grade. The final grade in the course will be based on total points. Grades will be assigned based on the following term composite scores:

Grading:

Name	Grade %
Honor Pledge	1.00 %
APUS Honor Code and Pledge	1.00 %
Introductory Forum	1.00 %
Introduction	1.00 %
Forums	5.00 %
Forum 1	0.33 %
Forum 2	0.33 %
Forum 3	0.33 %
Forum 4	0.33 %
Forum 5	0.33 %
Forum 6	0.33 %
Forum 7	0.33 %
Forum 8	0.33 %
Forum 9	0.33 %
Forum 10	0.33 %
Forum 11	0.33 %
Forum 12	0.33 %
Forum 13	0.33 %
Forum 14	0.33 %
Forum 15	0.33 %
Forum 16	0.33 %
4 week Thinkwell Homework	6.00 %
Assignment 1	2.00 %
Assignment 2	2.00 %
Assignment 3	2.00 %
2 week Thinkwell Homework	1.00 %
Assignment 4	1.00 %
4 week Unit Tests	54.00 %
Test 1 Critique	18.00 %
Test 2 Critique	18.00 %
Test 3 Critique	18.00 %
2 week unit Test	9.00 %
Test 4 Critique	9.00 %
Final Exam	24.00 %

Materials

Book Title: Thinkwell Calculus Online Materials - Thinkwell will send a user name and password to your primary email address. Instructions provided inside the classroom.

Author:

Publication Info: Thinkwell

ISBN: THINKWELL-CALC

Additional Resources: You will need a calculator to successfully complete this course. The calculator should include a memory and special functions keys. At your discretion, you may use a scientific or graphing calculator or the calculator on your computer that is capable of performing these functions. There are graphing aides available and they will be mentioned again within the classroom. You may use these for all graded assignments and examinations during the course.

Tutorials: Additional online help is available through the University. Please go to the web page at <http://www.apus.edu/media/mathVV/index.htm> to view the tutorials for this class. These tutorials include 4-6 minute vignettes on the course topics and are focused on the weekly learning objectives for Calculus I. Students may access these videos from the links in the Course Outline above by clicking on *Cntrl+Click* on the link.

Websites: In addition to the required course texts the following domain Websites are useful. Please abide by the university's academic policy when using Internet sources as well. Note Web site addresses are subject to change.

Site Name	Website URL/Address
Thinkwell	http://www.thinkwell.com/loginAndRegister/login.cfm

Course Guidelines

Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.

Tutoring

- [Tutor.com](#) offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the

course according to the published class schedule. The due date for each assignment is listed under each Assignment.

- Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- “Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.

University Policies

[Student Handbook](#)

- [Drop/Withdrawal policy](#)
- [Extension Requests](#)

- [Academic Probation](#)
- [Appeals](#)
- [Disability Accommodations](#)

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