MATH302 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: MATH302 Title: Statistics

Length of Course: 16

Prerequisites: MATH110, MATH111, MATH225 Credit Hours: 3

Description

Course Description: This is an interactive course designed to help students achieve a greater understanding of the statistical methods and models available to analyze and solve the wide variety of problems encountered in business, science, medicine, education, the social sciences, and other disciplines. Successful completion of this course will provide students with a working knowledge of the principles of both descriptive and inferential statistics, probability, averages and variations, normal probability distributions, sampling distributions, confidence intervals, statistical hypothesis tests, and correlation and regression analyses. The emphasis of the course will be on the proper use of statistical techniques and their application in real life -- not on mathematical proofs. This course will use Microsoft Excel for some of the work. Students should have a basic familiarity with Excel and have access to this software application. (Prerequisite: MATH110 OR MATH111 OR MATH225)

Course Scope:

Successful completion of this course will provide you with a working knowledge of the principles of statistics and enable you to solve problems involving simple probability, averages and variations, normal probability distributions, sampling distributions, confidence intervals, and the testing of statistical hypotheses. The course is designed for students who seek an understanding of how statistics can be applied in disciplines that require the use of descriptive and inferential statistical methods. The emphasis of the course will be on the proper use of statistical techniques and their implementation rather than on mathematical proofs. However, some mathematics is necessary in order to understand the proper application of the techniques. Thus, you should be familiar with basic mathematics as covered in MATH110 or an equivalent course.

Objectives

After completing the course, the student should be able to:

- CO-1. Distinguish meaningful statistics from those that are not meaningful.
- CO-2. Categorize data by type.
- CO-3. Organize data into tabular form.
- CO-4. Represent data using frequency distributions, histograms, frequency polygons, ogives, bar charts, Pareto charts, time series graphs, pie charts, box plots, stem and leaf, and other statistical

displays..

- CO-5. Compute measures of central tendency and measures of variance for quantitative data.
- CO-6. Explain basic probability theory.
- CO-7. Examine the outcomes in a sample space using various counting techniques.
- CO-8. Use the properties of different types of distributions, such as normal, uniform, and binomial to solve problems.
- CO-9. Compute the mean, variance, and standard deviation of a random variable using the concept of expected value .
- CO-10. Compute confidence interval estimates for various population parameters.
- CO-11. Determine the type of hypothesis test to use for different types of data.
- CO-12. Conduct hypothesis testing procedures for the population mean, the population proportion, the population variance, the population standard deviation, and for the differences between population parameters.
- CO-13.Use linear regression to model the relationship between two variables.
- CO-14. Predict the value of a response variable for a given level of an explanatory variable using linear regression.
- CO-15.Perform Chi-Square tests to determine the goodness of fit of data, the independence of variables, and the homogeneity of population proportions.

Outline

Week 1: The Nature of Probability and Statistics

Learning Objective(s)

CO-1, CO-2

Demonstrate knowledge of statistical terms

Identify and differentiate between the two branches of statistics

Identify types of data

Identify sampling techniques

Explain the difference between observational and experimental studies

Explain how statistics can be used and misused

Explain the importance of computers and calculators in statistics

Reading(s)

Read and study Chapter 1

View the videos:

Nature of Statistics and Probability

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Introduce yourself in the Introduction Forum and get to know your classmates. Remember, your post must be at least 250 words and must be posted by 11:55PM Eastern Time on the first Sunday of our course.

Respond to at least two other Week 1 Forum posts by 11:55PM Eastern Time on SUNDAY.

Suggested Practice Problems:

Chapter 1 Review Exercises (p26): 2, 3, 4, 6, 12, 17, 21, 25, 26, and 27.

Complete the Chapter 1 Quiz (p29). This does not need to be turned in. It is for your use. Answers are in the text.

Week 2: Frequency Distributions and Graphs

Learning Objective(s)

CO-3

Organize data using frequency distributions

Represent data in frequency distributions graphically using histograms, frequency polygons, and ogives

Represent data using Pareto charts, time series graphs and pie graphs

Draw and interpret a stem and leaf plot

Draw and interpret a scatter plot for a set of paired data

Reading(s)

Read and study Chapter 2

View the videos:

Frequency Distributions and Graphs

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 2 Review Exercises (p102): 1, 2, 4, 5, 6, 18, and 22

Complete the Chapter 2 Quiz (p105). This does not need to be turned in. It is for your use. Answers are in the textbook.

Make a post to the Weeks 2-3 Forum by 11:55PM Eastern Time on Sunday.

Week 3: Data Description

Learning Objective(s)

CO-5

Summarize data using measures of central tendency such as the mean, median, mode and midrange

Describe data using measures of variation such as the range, variance, and standard deviation

Identify the position of a data value in a data set, using various measures of position such as percentiles, deciles and quartiles

Use the techniques of exploratory data analysis, including box plots and five number summaries to discover

various aspects of data Reading(s)

Read and study Chapter 3

View the videos: Data Description

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 3 Review Exercises (p181): 1, 2, 8, 13, 16, and 20

Complete the Chapter 3 Quiz (p184). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 2-3 forum posts by 11:55PM Eastern Time on Sunday.

Complete Quiz #1 by 11:55 PM Eastern Time on Sunday.

Access Quiz1_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 4: Probability and Counting Rules

Learning Objective(s)

CO-6; CO-7

Determine sample spaces and find the probability of an event

Find the probability of compound events using addition rules

Find the probability of compound events using multiplication rules

Find the conditional probability of an event

Find the total number of outcomes in a sequence of events using the fundamental counting rule

Use the permutation rule to find the number of ways that r objects can be selected from n objects

Use the combination rule to find the number of ways that r objects can be selected from n objects without regard to order.

Find the probability of an event using counting rules

Reading(s)

Read and study Chapter 4

View the videos:

Probability and Counting Rules

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 4 Review Exercises (p251): 2, 3, 8, 15, 17, 24, 27, 32, 34, and 37.

Complete the Chapter 4 Quiz (p254). This does not need to be turned in. It is for your use. Answers are in the text.

Make a post to the Weeks 4-5 Forum by 11:55PM Eastern Time on SUNDAY.

Week 5: Discrete Probability Distributions.

Learning Objective(s)

CO-9

Construct a probability distribution for a random variable

Find the mean, variance, standard deviation and expected value for a discrete random variable

Find the probability for X successes in n trials of a binomial experiment

Find the mean, variance, and standard deviation for the variable of a binomial distribution

Reading(s)

Read and study Chapter 5

View the videos:

Discrete Probability Distributions

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 5 Review Exercises (p292): 1, 2, 3, 5, 8, 12, 15, 17, 20, and 21.

Complete the Chapter 5 Quiz (p293). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 4-5 forum posts by 11:55PM Eastern Time on Sunday.

Complete Quiz #2 by 11:55 PM Eastern Time on Sunday.

Access Quiz2_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 6: The Normal Distribution I

Learning Objective(s)

CO-8

Identify distributions as symmetric or skewed

Identify the properties of a normal distribution

Find the area under the standard normal distribution, given various z values

Find the probabilities for a normally distributed variable by transforming it into a standard normal distribution

Find specific data values for given percentages, using the standard normal distribution

Reading(s)

Read and study Chapter 6.1-6.2

View the videos:

Normal Distribution

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 6 Review Exercises (p346): 1, 2, and 7

Make a post to the Weeks 6-7 Forum by 11:55PM Eastern Time on SUNDAY.

Week 7: The Normal Distribution II

Learning Objective(s)

CO-8

Use the central limit theorem to solve problems involving sample means for large samples

Use the normal approximation to compute probabilities for a binomial variable

Reading(s)

Read and study Chapter 6.3-6.4

View the videos:

Normal Distribution

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 6 Review Exercises (p346): 4, 5, 11, and 16.

Complete the Chapter 6 Quiz (p348). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 6-7 forum posts by 11:55PM Eastern Time on SUNDAY.

Week 8: Midterm Examination

Learning Objective(s)

Demonstrate Knowledge of Statistical Concepts

Reading(s)

Review Chapters 1 - 6

Assignment(s)

Make a post to the Weeks 8-9 Forum by 11:55PM Eastern Time on SUNDAY.

Complete the Midterm Exam by 11:55 PM Eastern Time on Sunday.

Access Midterm Exam_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 9: Confidence Intervals and Sample Size

Learning Objective(s)

CO-10

Find a confidence interval estimate for the population mean when σ is known.

Determine the sample size for finding a confidence interval for the mean

Find a confidence interval estimate for the population mean when σ is unknown.

Find the confidence interval for a proportion

Determine the minimum sample size for finding a confidence interval for a proportion

Find a confidence interval for a variance and a standard deviation

Reading(s)

Read and study Chapter 7

View the videos:

Confidence Interval & Sample Size

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 7 Review Exercises (p392): 3, 4, 7, 11, and 16.

Complete the Chapter 7 Quiz (p393). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 8-9 Forum posts by 11:55PM Eastern Time on SUNDAY.

Complete Quiz #3 by 11:55 PM Eastern Time on Sunday.

Access Quiz3_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 10: Hypothesis Testing I

Learning Objective(s)

CO-11; C0-12

Understand the definitions used in hypothesis testing

State the null & alternate hypotheses

Find the critical values for the z test

State the five steps used in testing

Test means for large samples using the z test

Test means for small samples using the t test

Reading(s)

Read and study Chapter 8-1 to 8-4

View the videos:

Hypothesis Testing

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 8 Review Exercises (p459): 1, 2, 5, 9, 10, 15, and 17.

Make a post to the Weeks 10-11 Forum by 11:55PM Eastern Time on SUNDAY.

Week 11: Hypothesis Testing II

Learning Objective(s)

CO-11; CO-12

Test proportions using the z test

Test variances or standard deviations using the Chi Square test

Test hypotheses using confidence intervals

Reading(s)

Read and study Chapter 8-5 to 8-6

View the videos:

Hypothesis Testing

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 8 Review Exercises (p460): 12, 13, and 14.

Complete the Chapter 8 Quiz (p462). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 10-11 Forum posts by 11:55PM Eastern Time on SUNDAY.

Complete Quiz #4 by 11:55 PM Eastern Time on Sunday.

Access Quiz4_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 12: Testing Differences between means, variances and proportions

Learning Objective(s)

CO-11; CO-12

Test the difference between two population means using the z test

Test the difference between two population variances or standard deviations

Test the difference between two population means using the t-test

Test the difference between two means when using small dependent samples

Test the difference between two population proportions

Reading(s)

Read and study Chapter 9

View the videos:

Testing the Differences in Means, Variances, and Proportions

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 9 Review Exercises (p520): 1, 4, 8, 9, and 12

Complete the Chapter 9 Quiz (p522). This does not need to be turned in. It is for your use. Answers are in the text.

Make a post to the Weeks 12-13 Forum by 11:55PM Eastern Time on SUNDAY.

Week 13: Regression and Correlation

Learning Objective(s)

CO-13; CO-14

Draw a scatter plot for a set of ordered pairs

Compute the correlation coefficient

Test the hypothesis: H0: ρ =0

Compute the equation of the regression line

Compute the coefficient of determination

Compute the standard error of the estimate

Find a predication interval

Reading(s)

Read and study Chapter 10

View the videos:

Regression and Correlation

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following questions in the Chapter 10 Review Exercises (p565): 2, 4, and 8. Complete the Chapter 10 Quiz (p567). This does not need to be turned in. It is for your use. Answers are in the text.

Respond to at least two other Weeks 12-13 forum posts by 11:55PM Eastern Time on SUNDAY.

Complete Quiz #5 by 11:55 PM Eastern Time on Sunday.

Access Quiz5_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Week 14: Chi-Square Tests and ANOVA

Learning Objective(s)

CO-15

Conduct Goodness of Fit tests

Use Contingency Tables to Test Independence

Reading(s)

Read and Study Chapter 11.1 – 11.3

View the videos:

Hypothesis Testing

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Suggested Practice Problems:

Complete the following guestions in the Chapter 11 Review Exercises (p615): 5, and 8.

Make a post to the Weeks 14-15 Forum by 11:55PM Eastern Time on SUNDAY.

Week 15: Course Review

Learning Objective(s)

Summarize Course Material

Reading(s)

Review all course material.

Assignment(s)

Respond to at least two other Weeks 14-15 forum posts by 11:55PM Eastern Time on SUNDAY.

Week 16: Final Examination

Learning Objective(s)

Demonstrate your knowledge of statistics for the analysis of business management decisions

Reading(s)

View the videos:

Videos are located at:

http://www.apus.edu/media/mathWV/statistics.htm

View and study the PowerPoint presentation in the Lessons section of the classroom

Assignment(s)

Make a post to the optional Week 16 Forum. There is no requirement to respond to others, but you are encouraged to do so.

Complete the 3 hour timed, online Final Exam by 11:55 PM Eastern Time on Sunday.

Access Final Exam_MATH302 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

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 review the PowerPoint presentations and videos, which can be accessed via the links in the Lessons section of the online classroom, in a timely manner. Students should also complete the suggested Review Problem Sets as set forth in the schedule provided in the Course Outline of this syllabus. Review Problem Sets will not be graded, but their solutions will be available via the link in the Lessons section of our online classroom. Students should refer to these solutions as a means to confirm their understanding of the topics

covered in the Review Problem Sets.

Student grades for the course will be based on participation in the forums, five graded quizzes, a midterm exam, and a final exam.

<u>Class Participation:</u> Naturally, I value punctuality, familiarity with the required readings, and classroom questions or comments that are relevant and insightful. Whether helping someone understand a point, seeking clarification of a concept you may not completely understand, or contributing to the positive flow of the class discussion based on your experience, it is important for you to realize that learning is an action process—and sharing is a key ingredient in undertaking that process successfully. Therefore, I urge you to participate actively and do your best to contribute to a positive and effective learning environment--for yourself and others.

I urge you to utilize the Question and Answer Forum as a means to interact with your classmates. If while working through examples or problems from our textbook you have a question or a comment, please post the question or comment in the Question and Answer Forum. Naturally, I hope that question and answers posted in the Question and Answer Forum will facilitate interactions among the members of our class.

Your first required Forum post is the week 1 Introduction Forum. This must be completed by 11:55PM Eastern Time on Sunday during the first week of our course. I will evaluate your responses to the Forums using a 10 point scale, and your contribution to each of the Forums will count as 1.25 percent of the overall course grade, for a total of 10 percent. My evaluation of your participation in our forums will be based on the extent to which you participated and fostered a positive and effective learning environment—for yourself and others. Participating and sharing are the keys. I will post my wrap-up comments for each of our weekly Forums after their due dates. At that time the Forum will be locked and no additional posts will be permitted. Naturally, I urge you to read my wrap-up post, the posts of your classmates, and any summary feedback I provide. If you wish to continue to discuss a topic posed in a Forum that has been locked, you can certainly do so by using the Message tool or the Q&A Forum to interact with the other members of our course.

<u>The Week 1 Introduction Forum</u>: 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.

Quizzes and Examinations: The five graded quiz assignments are dispersed throughout the course. Each quiz will count as 10% of the course grade, the midterm and final exams will each comprise 20% of the course grade. Generally, the exams and quizzes will contain problems similar to those discussed in the suggested homework problems and the many examples given in our textbook. However, you should expect to be challenged by the graded exercises. Exams and quizzes will be conducted as indicated on the course schedule and students are expected to complete them on time. No late submissions will be accepted.

Specific instructions will be provided for each examination and quiz in the Lessons section of our classroom at the outset of the week in which these graded exercises are due. Each of these graded exercises is to be completed on an individual basis. You may consult published textbooks, articles, and other printed materials. However, **no collaboration is permitted on the examinations or quizzes.** You are not to discuss, orally, in print—in any manner—any aspect of the graded exercises with anyone other than your instructor. Clearly, student-teacher relationships are built on trust. This is especially true in the case of an online course. For example, students must trust that teachers have made appropriate decisions about the structure and content of the courses they teach, and teachers must trust that students complete assignments as directed. Acts that violate this trust undermine the educational process and compromise the integrity of the perpetrator. Don't cheat. Don't compromise your integrity. To do so invalidates the very purpose which likely motivated you to undertake this course—to learn, to become a better decision maker, to broaden your perspective, and to increase your skill set.

At the beginning of the week in which they are due, exams and quizzes will be posted in the Tests & Quizzes section of our classroom. When you are prepared to take an assessment go to the Tests & Quizzes section of our classroom and click on the assessment. With the exception of the Final Exam, which is a 3 hour timed

exam, all other graded assessments have no time limit. It is important for you to understand that you will be able to submit your answers to an assessment only once. Your answers must be submitted by the 11:55PM Eastern Time deadline, as indicated in the syllabus. I will not accept late submissions. So, please don't wait until the last minute to submit your answers to a quiz or exam. As soon as you submit your answers your assessment will be graded, and your score will be recorded in the Gradebook. Twenty-four hours after the deadline and once everyone has submitted their answers, you can access the feedback by clicking on the assessment in the Tests & Quizzes section of our classroom. Naturally, if you answer any of the questions on an assessment incorrectly I urge you to review the feedback and reconcile any errors you may have made on a quiz or exam.

The Final Examination will be worth 25 points and count as 20% of the final grade. It will be a three hour, online, open-book, open-note exam. The final exam will cover all of the material presented during our course. You will be able to access the Final Exam only once. So, be sure to set aside a dedicated three hour period in which to complete it. You may not consult with any other person while taking the exam.

The notations used in statistical work aren't found in many word processing programs, making it difficult to produce many of the symbols used in our course. You may wish to use the Symbol font in Microsoft Word and the Insert/Object/Microsoft Equation feature in Word when preparing documents related to our course. Insert/Symbol is also sometimes useful. Of course, you will also want to familiarize yourself with the Insert/Edit Equation feature contained in the Rich Text Editor that is available in the Rich Text Editor toolbar in our classroom. Additionally, since many of the computations and analyses required in our course can be easily carried out using Microsoft Excel, you may wish to familiarize yourself with the process whereby Excel outputs can be copied and pasted into a Word or pdf file.

Students' final grades will be posted within 7 days of the end of the semester. Students should not telephone the university looking for grades until at least 30 days after the end of the semester.

Please see the <u>Student Handbook</u> to reference the University's <u>grading scale</u>.

Grades for the course will be based on the following.

Grading:

Name	Grade %
Forums	10.00 %
Week 1 Forum	1.25 %
Weeks 2-3 Forum	1.25 %
Weeks 4-5 Forum	1.25 %
Weeks 6-7 Forum	1.25 %
Weeks 8-9 Forum	1.25 %
Weeks 10-11 Forum	1.25 %
Weeks 12-13 Forum	1.25 %
Weeks 14-15 Forum	1.25 %
Quizzes	50.00 %
Quiz 1_MATH302	10.00 %
Quiz 2_MATH302	10.00 %
Quiz 3_MATH302	10.00 %
Quiz 4 MATH302	10.00 %
Quiz 5 MATH302	10.00 %
Midterm Exam	20.00 %
Midterm Exam_MATH302	20.00 %
Final Exam	20.00 %
Final Exam_MATH302	20.00 %
APUS Honor Code	0.00 %
APUS Honor Code and Pledge	0.00 %

Materials

Book Title: Elementary Statistics, A Step by Step Approach: A Brief Version, 7th ed. - the VitalSource eBook will be provided through the APUS Bookstore; Connect access provided inside the classroom.

Author: Bluman

Publication Info: McGraw-Hill

ISBN: 9781259345289

Book Title: You must validate your cart to get access to your VitalSource e-book(s). If needed, instructions

are available here - http://apus.libguides.com/bookstore/undergraduate

Author: N/A

Publication Info: N/A

ISBN: N/A

Within our textbook the author refers to an Excel statistical addin called MegaStat. I will not use this software addin. Instead, I will utilize Excel to perform many of the computations in our course.

If you are interested in learning more about MegaStat go to www.mhhe.com/bluman click on the Elementary Statistics: A Brief Version 6/e book cover. This will take you to the McGraw-Hill website. On the upper left side of that page, click on Student Edition. In the upper left part of the page that is launched you will see a link to MegaStat. Click on it to get instructions for downloading MegaStat along with other useful information.

Microsoft Excel is required for this course. Students should have a basic familiarity with Excel and must have access to the 2007 or later version of this software application.

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

Site Name	Website URL/Address
Mathematics Videos	http://www.apus.edu/media/mathWV/index.htm
Statistics Videos	http://www.apus.edu/media/mathWV/statistics.htm
Stat-Soft Supplemental Textbook	http://www.statsoft.com/textbook/
Microsoft Mathematics	Microsoft Mathematics
Hyper Stat Online	http://www.davidmlane.com./hyperstat/index.html
Calculator website	http://www.calculator.com
Dr. Math	http://mathforum.org/dr.math/
Purple Math	http://www.purplemath.com/
Video Tutorials by Michael Sullivan	Video Tutorials TCC

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

<u>Tutor.com</u> 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

- <u>Drop/Withdrawal policy</u>
- Extension Requests
- Academic Probation
- Appeals
- Disability Accommodations

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

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