MATH530

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: MATH530 Title: Applied Statistics

Length of Course: 8

Prerequisites: N/A 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 data and to solve problems associated with making decisions and testing hypotheses in uncertain conditions. The course is designed for students seeking a thorough appreciation of how statistical tools can support sound decision making efforts in a wide range of situations. Topics covered include inferential statistics, averages, measures of variation, the Normal distribution and its uses, sampling distributions, hypothesis testing for large and small samples, regression and correlation, and Chi-Square distributions. The skills, tools and methodologies needed to analyze systems and to make decisions are provided. State of the art analytical tools and quantitative methods, including computer-based solutions are discussed. 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 introduced and discussed during the course.

Course Scope:

Successful completion of this course will provide you with a working knowledge of the principles of statistics to enable you to solve problems involving simple probability, averages and variations, normal probability distributions, sampling distributions, confidence intervals, testing statistical hypotheses, and simple linear regression models. The course is designed for students who seek to apply the tools of statistics to solve problems involving uncertainty in a wide range of disciplines. 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 introduced in our course.

Objectives

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

CO-1. Identify types of data.

CO-2. Demonstrate the proper use of statistical terminology and notation.

CO-3. Describe the various types of sampling techniques.

- 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 the relationship between statistics and probability.
- CO-7. Compute the probability of events using the laws of probability.
- CO-8. Examine the outcomes in a sample space using various counting techniques.
- CO-9. Distinguish between discrete and continuous random variables.
- CO-10. Evaluate the mean and standard deviation of random variables and linear combinations of random variables.
- CO-11. Analyze real-world applications using the binomial, geometric, Poisson, and normal probability distributions.
- CO-12. Assess the probability of events associated with the normal distribution.
- CO-13. Evaluate the sampling distribution for the sample mean, sample variance, and sample proportion.
- CO-14. Create confidence interval estimates for population means, population proportions, the difference between population means, and the difference between population proportions from samples.
- CO-15. Produce appropriate tests of hypotheses associated with various population parameters.
- CO-16. Synthesize the results of statistical tests of hypotheses to draw meaningful conclusions regarding the significance of various types of statistical tests.
- CO-17. Judge the risk associated with making a type I error in conducting tests of hypotheses by computing the p-value associated with such tests.
- CO-18. Generate linear regression models to predict the value of a response variable.
- CO-19. Justify the use of linear regression models to forecast future observations in various real-world applications.

Outline

Week 1: Getting Started & Organizing Data, Averages and Variation

Learning Objective(s):

CO-1 thru CO-4

- 1. Be familiar with the uses of statistics.
- 2. Explain the distinction between nominal, ordinal, interval and ratio level data. Be able to identify the highest appropriate level of measurement for a set of data.
- 3. Construct a random sample using a random number table.
- 4. Be familiar with various sampling techniques. 5. Construct tabular and graphical displays of data to include Pareto charts, time-series plots, frequency tables, stem and leaf displays, histograms, and ogives.

CO-5

- 1. Describe and use the concepts of mean, median, mode, and trimmed mean as expressions of the "average" of a set of data, and be able to calculate each.
- 2. Calculate weighted averages for a set of tabular data.
- 3. Explain the concepts of range, variance, and standard deviation as expressions of the "spread" of a set of data, and be able to use your statistical calculator to calculate each.
- 4. Demonstrate the concept of percentiles, be able to calculate interquartile range as an expression of spread, and be able to display a given data set in the form of a box and whisker plot.
- 5. Use Chebyshev's theorem to determine the smallest possible proportion of data that must lie within k standard deviations of the mean.

Reading(s):

Read and study Chapters 1, 2 and 3.

Review PowerPoint presentation.

View the videos: Frequency Distributions and Graphs Data Description

Videos are located at:

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

Assignment(s):

First required contact. Introduce yourself on the Week 1 Introduction Forum and get to know your classmates

Review Problems:

Chapter 1 Review (page31): problems 6, 7 Chapter 2 Review (page72): problems 9, 11 Section 3.1 (page89): problems 15, 17

Section 3.2 (page104): problems 17, 19 Section 3.3 (page117): problems 7, 9

Chapter 3 Linking Concepts (page 125): Writing exercise 4

Post questions or comments on the Q&A Forum.

Week 2: Elementary Probability Theory

Learning Objective(s):

CO-5 thru CO-7

- 1. Differentiate between dependent and independent events.
- 2. Calculate probabilities based on the relative frequency distribution for a given set of data.
- 3. Calculate probabilities for compound events and utilize the definition of conditional probability.
- 4. Use a tree diagram to display potential outcomes of an experiment and calculate probabilities.
- 5. Explain the concepts of "combination" and "permutation," be able to determine under what circumstances either concept should be applied and be able to use factorial notation to calculate each.

Reading(s):

Read and study Chapter 4
Review PowerPoint presentation.

View the videos:

Probability and Counting Rules

Videos are located at:

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

Assignment(s):

Make a post to the Week 2 Discussion Forum by 11:55PM Wednesday

Complete Quiz #1 (chapters 1-3) by 11:55 PM Eastern Time on Sunday. Access Quiz1_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 4.1 (page139): problems 16, 17 Section 4.2 (page155): problems 13, 15, 19 Section 4.3 (page170): problems 5, 9, 26

Post questions or comments on the Q&A Forum.

Week 3: The Binomial Probability Distribution and Related Topics

Learning Objective(s):

CO-8 thru CO-11

- 1. Differentiate between discrete and continuous variables and be able to identify which describes a particular measurement.
- 2. Calculate the mean and standard deviation of a discrete probability distribution.
- 3. Explain and use the binomial (a.k.a. Bernoulli) probability distribution and be able to calculate probabilities, expected value, and the standard deviation for a binomial distribution.
- 4. Master the use of the binomdist Excel function.
- 5. Explain the uses of geometric and Poisson distributions.

Reading(s):

Read and study Chapter 5

Review PowerPoint presentation.

View the videos:

Discrete Probability Distributions

Videos are located at:

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

Assignment(s):

Make a post to the Week 3 Discussion Forum by 11:55PM Wednesday

Review Problems:

Section 5.1 (page190): problems 1, 3, 13 Section 5.2 (page204): problems 15, 25, 27 Section 5.3 (page217): problems 7, 11, 16 Section 5.4 (page232): problems 10, 16

Post questions or comments on the Q&A Forum.

Week 4: Normal Distributions & Sampling 1,2 & 3

Learning Objective(s):

CO-12 thru CO-13

- 1. Describe and explain the properties of a normal (a.k.a. Gaussian or bell curve) distribution as displayed in graphical form, and be able to explain how changes in mean and standard deviation would affect the appearance of the graph.
- 2. Use the empirical rule to determine the amount of data that lies within one, two or three standard deviations of the mean.
- 3. Use a control chart and be able to construct one for a given set of data and a given mean and standard deviation. Using the three warning signals discussed in the text, use the control chart to determine whether a process is in control or out of control.
- 4. Use the z-score formula to determine the number of standard units a given measurement is from the mean of a distribution.
- 5. Calculate probabilities of events in a standard normal distribution, using a table of areas under a standard normal distribution curve.
- 6. Master the normsdist Excel function.
- 7. Calculate probabilities of events in any normal distribution, using corresponding z-scores or the normalist function in Excel.
- 8. Understand the relationship between a statistic and its corresponding population parameter.

- 9. Comprehend the meaning of the Central Limit Theorem.
- 10. Use the normal approximation to the binomial distribution to solve problems involving binomial distributions with a large n. 3. Know the sampling distribution of the sample proportion.

Reading(s):

Read and study Chapter 6.1-6.6, Review PowerPoint presentation.

View the videos: Normal Distribution Sampling Distribution of Sample Mean

Videos are located at:

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

Assignment(s):

Make a post to the Week 4 Discussion Forum by 11:55PM Wednesday

Complete Exam #1 (chapters 1-5) by 11:55 PM Eastern Time on Sunday. Access Exam1_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 6.1 (page259): problems 5, 7, 11 Section 6.2 (page274): problems 8, 11, 19, 42 Section 6.3 (page286): problems 9, 17, 25 Section 6.4 (page296): problems 5, 6 Section 6.5 (page303): problems 11, 13, 17 Section 6.6 (page314): problems 7, 13, 15

Post questions or comments on the Q&A Forum.

Week 5: Estimation 1 & 2

Learning Objective(s):

CO-14

- 1. Using the central limit theorem, find the confidence interval for the mean of a population based on the observed mean of a large sample.
- 2. Using the Student's t distribution, find the confidence interval for the mean of a population based on the observed mean of a small sample.
- 3. Master the normsiny, tiny, and tdist Excel functions.
- 4. Find the sample size required to estimate μ with a particular level of confidence and accuracy.
- 5. Calculate a point estimate and confidence intervals for p based on a sample from a binomial distribution.
- 6. For a given confidence interval, determine required sample size.
- 7. For two independent samples of data, compute confidence intervals for the differences in population parameters.

Reading(s):

Read and study Chapter 7.1-7.4 Review PowerPoint presentation.

View the videos:

Confidence Interval and Sample Size

Videos are located at:

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

Assignment(s):

Make a post to the Week 5 Discussion Forum by 11:55PM Wednesday

Complete Quiz #2 (chapter 6) by 11:55 PM Eastern Time on Sunday. Access Quiz2_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 7.1 (page345): problem 19 Section 7.2 (page355): problems 13, 21 Section 7.3 (page368): problems 15, 21, 23 Section 7.4 (page384) problem 11 Chapter 7 Review Problems (page399): problem 17

Post questions or comments on the Q&A Forum.

Week 6: Hypothesis Testing 1 & 2

Learning Objective(s):

CO-15 thru CO-17

- 1. Establish two hypotheses and determine which is most likely based on the sample data.
- 2. Test hypotheses regarding the means of two populations represented by large samples.
- 3. Determine the smallest level of significance for which sample data will support rejection of the null hypothesis. Determine p-values for tests of hypotheses.
- 4. Use the Student's t distribution to test hypotheses regarding the means of two populations represented by small samples.

Reading(s):

Read and study Chapter 8.1-8.5 Review PowerPoint presentation.

View the videos:

Hypothesis Testing

Videos are located at:

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

Assignment(s):

Make a post to the Week 6 Discussion Forum by 11:55PM Wednesday

Complete Exam #2 (chapters 6-7) by 11:55 PM Eastern Time on Sunday. Access Exam2_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 8.1 (page422): problems 15, 19 Section 8.2 (page436): problems 11, 17, 19 Section 8.3 (page447): problems 11, 17 Section 8.4 (page460): problems 11, 17 Section 8.5 (page482): problems 19, 27

Post questions or comments on the Q&A Forum.

Week 7: Regression and Correlation 1 & 2

Learning Objective(s):

CO-18 thru CO-19

- 1. Construct scatter diagrams, estimate a "best fit" line and use it to determine correlation of paired data.
- 2. Using least squares regression, calculate a best-fit line for a set of paired data.
- 3. Measure spread about a set of data points around a least squares line by using standard error of estimate, and determine confidence intervals for y.

CO-4, CO-5, CO-7

- 1. Use the Pearson product-moment correlation coefficient and coefficient of determination to evaluate the strength of the linear relationship between two variables.
- 2. Determine the statistical significance of a correlation coefficient.

Reading(s):

Read and study Chapter 9.1-9.4 Review PowerPoint presentation.

View the videos:

Regression and Correlation

Videos are located at:

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

Assignment(s):

Complete Quiz #3 (Chapter 8 & Sections 9.1-9.2) by 11:55 PM Eastern Time on Sunday. Access Quiz3_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 9.1 (page514): problem 13 Section 9.2 (page534): problem 9 Section 9.3 (page557): problem 11

Post questions or comments on the Q&A Forum.

Week 8: Chi-Square Distributions

Learning Objective(s):

CO-16 thru CO-17

- 1. Use contingency tables to test the dependence of random variables.
- 2. Use the chi-square probability distribution to test for goodness of fit of a given distribution to a distribution of raw data values.
- 3. Use the chi-square probability distribution to construct statistical tests and confidence intervals for population variances and standard deviations
- 4. Master the chiinv, chidist, finv, and fdist Excel functions.

Reading(s):

Read and study Chapter 10.1-10.3 Review PowerPoint presentation.

View the videos:

Chi Square Goodness of Fit and Chi Square Test of Independence

Videos are located at:

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

Assignment(s):

Turn in Exam #3 (chapters 8-10) by 11:55 PM Eastern Time on Sunday. Access Exam3_MATH530 in the Tests & Quizzes section of our classroom. Remember you will be able to submit your answers only once.

Review Problems:

Section 10.1 (page606): problem 15 Section 10.2 (page614): problems 9, 11 Section 10.3 (page628): problems 5, 9

Post questions or comments on the Q&A Forum.

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.

I urge you to utilize the Q&A 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 on the Q&A Forum. Naturally, I hope that the Q&A Forum will facilitate interactions among the members of our class. If you have an insight that you wish to share or a question you wish to have answered please use the Q&A Forum to exchange such information.

Student grades for the course will be based on class participation, three guizzes, and three examinations.

<u>Class Participation:</u> Punctuality, familiarity with the required readings, and classroom questions or comments that are relevant and insightful are valued. 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 in an effort to build a positive and effective learning environment—for yourself and others.

Class participation via the Discussion Forums is a course requirement and will count as 10 percent of the overall course grade. You are required to respond to the questions posed in these Discussion Forums by making a post in the Discussion Forum by 11:55PM EASTERN time on Wednesday during the week in which a discussion question is posed. Your responses to each of these questions will be evaluated using a 0 to 20 scale, and your contribution to these Discussion Forums will count a total of 10 percent toward the overall course grade. Keep in mind that you need not necessarily answer a discussion question correctly to earn full credit for your post. The evaluation 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. Collectively, I'm confident that we will derive the correct response to each of these discussion questions.

To make a post to a Discussion Forum, click on the Forum topic link, then click Start a New Conversation. 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. Answers to these discussion questions will be posted after the Wednesday 11:55PM EASTERN time deadline. At that time the Discussion Forum will be locked and no additional posts will be permitted. You are urged to read the solution post, the posts of your classmates, and the feedback that is provided. If you wish to continue to discuss a the question 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.

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 Start a New Conversation. 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

Quizzes & Examinations: Three examinations and three quizzes will be utilized to evaluate your performance in the course. Each exam will account for 20% of your overall grade. Each quiz will account for 10% of your overall 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 <u>your</u> perspective, and to increase <u>your</u> 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. 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 and the course calendar. Late submissions are not accepted, 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. The correct answers will be available 24 hours after the deadline and once everyone has submitted their answers. At that time, 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 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 (the fx icon) contained in the Rich Text Editor that is available in the Forums section of 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.

Additionally, as noted above, 2 percentage points of extra credit will be awarded to every student making an appropriate post to the Week 1 Introduction Forum.

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>.

The final grade in the course will be based on three examinations, three quizzes, and five Challenge Discussion Boards, as indicated below. Grades will be assigned based on the following scores:

Grading:

Name	Grade %
APUS Honor Code	1.00 %
APUS Honor Code and Pledge	1.00 %
Forums	10.00 %
Week 1 Forum	1.25 %
Week 2 Forum	1.25 %
Week 3 Forum	1.25 %
Week 4 Forum	1.25 %
Week 5 Forum	1.25 %
Week 6 Forum	1.25 %
Week 7 Forum	1.25 %
Week 8 Forum	1.25 %
Quizzes	30.00 %
Quiz 1_MATH530	10.00 %
Quiz 2_MATH530	10.00 %
Quiz 3 MATH530	10.00 %
Exams	60.00 %
Exam1_MATH530	20.00 %
Exam2_MATH530	20.00 %
Exam3_MATH530	20.00 %

Materials

Book Title: Understandable Statistics, 10th ed. (Ebook format only available at the APUS Bookstore,

please try other sources if a hard copy is preferred.)

Author: Brase, Charles Henry

Publication Info: Brooks/Cole Publishing

ISBN: 9780840048387

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.

In addition to the required course texts, there are many public domain Websites that are useful. Please abide by the university's academic honesty policy when using Internet sources.

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

- Drop/Withdrawal policy
- 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.

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.