



Graduate Course Syllabus

HCM 525: Inferential Statistics

Center: Online

Credits: 3

Course Prerequisites

None

Course Description

This course covers descriptive and inferential statistics needed by practitioners and healthcare administrators for evidence-based decision making. This course focuses on the understanding and application of basic descriptive and inferential statistics, appropriate interpretation of statistical results, and real-world presentation of data. Particular emphasis is on data processing, data analysis, appropriate use and interpretation of statistical tests, drawing conclusions from data, validity of conclusions, reporting results, discussion of results, and critiquing research.

Course Outcomes

- Determine the most appropriate statistical method for addressing given management-specific research questions and data sets
- Design and conduct effective statistical analyses using a variety of computer software applications such as Microsoft Excel and Minitab
- Draw accurate, empirically based inferences from analyses conducted on given data
- Communicate the results of statistical data analysis using clear, consistent, and appropriate written, numerical, and graphical conventions
- Critique the appropriateness of chosen statistical methods and interpretations of data drawn from published research studies

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, [MBS Direct](#), rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC. ISBN: 9781433805615

Keller, G. (2011). *Statistics for management and economics* (9th ed.). Mason, OH: South-Western Cengage. ISBN: 9780538477499

Microsoft Excel:

Note: If you need help with Excel, there are several video tutorials that can be found via [Atomic Learning](#). Sign in with your SNHU username and password. Under the Search tab, type in Microsoft Excel and click the Search button on the right (or just press Enter on your keyboard). You will see several Excel video tutorials listed that you can access to learn more about Microsoft Excel, Statistical Analysis with Excel Training, etc.

Minitab:

Note: You can find the free Minitab software download and information on using Minitab in mySNHU. Once logged into your mySNHU page, scroll down to the Technology section on the left and click on Computer/Technical Resources. On this page, scroll down to Resources for Faculty and Students and click on the Minitab category. You will find the Minitab download option under the Student Resources tab and additional information on using Minitab in this area as well. These two additional resources may be beneficial as well: 1) [Lessons from Minitab Help](#), 2) [Meet Minitab](#).

Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Getting Started	1	3	3
Assignment	4	5	20
Reflection Journal	3	4	12
Exam I	1	10	10
Exam II	1	10	10
Final Exam	1	15	15
Quantitative Research Project			
Part I: Quantitative Research Plan	1	10	10
Part II: Research Method Plan	1	10	10
Part III: Measurement and Statistical Approaches	1	10	10
Total Course Points:			100

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

<i>Total Points: 100</i>				
Grade	Numerical Equivalent	Points	Points Equivalent	
			<i>Lower</i>	<i>Upper</i>
A	93-100	4.00	93	100
A-	90-92	3.67	90	92
B+	87-89	3.33	87	89
B	83-86	3.00	83	86
B-	80-82	2.67	80	82
C+	77-79	2.33	77	79
C	73-76	2.00	73	76
F	0-72	0.00	0	72
I	Incomplete			
IF	Incomplete/Failure			
W	Withdrawn			

*Incomplete and Incomplete/Failure: Any student requesting an "I" grade must complete a Student Petition and Contract for a Grade of Incomplete and submit it to the proper offices prior to the final day of the term/semester. The petition will specify a deadline by which the coursework must be completed. The incomplete automatically becomes an "IF" if work has not been completed and a grade has not been submitted by the specific deadline.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. Eastern Time on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Statistics and Healthcare Management Keller (2011): Chapters 1, 2, and 3 Getting Started 1-1 Discussion: Getting Started 1-2 Reflection Journal 1-3 Assignment
2	Descriptive Statistics and Data Collection Keller (2011); Chapters 4 and 5 2-1 Assignment
3	Probability Keller (2011): Chapters 6 and 8 3-1 Assignment 3-2 Exam I
4	Sampling and Estimation Keller (2011): Chapters 9 and 10 4-1 Assignment
5	Hypothesis Testing and Inferential Statistics Keller (2011): Chapters 11 and 13 5-1 Reflection Journal
6	Analysis of Variance Keller (2011): Chapter 14 6-1 Quantitative Research Project: Part I: Quantitative Research Plan
7	Chi-Square Tests Keller (2011): Chapter 15 7-1 Exam II
8	Regression and Correlation Keller (2011): Chapters 16 and 17 8-1 Quantitative Research Project: Part II: Research Method Plan
9	Non-Parametric Statistics Keller (2011): Chapter 19 9-1 Quantitative Research Project: Part III: Measurement and Statistical Approaches
10	Decision Analysis Keller (2011): Chapter 22 10-1 Quantitative Research Project: Part IV: Final Project Submission 10-2 Reflection Journal 10-3 Final Exam

Attendance Policy

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the [full attendance policy](#).

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the [full late assignment policy](#).

SNHU College of Online and Continuing Education Guide to Student Success

Review the [guide to student success](#).

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns.

We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services. We look forward to hearing from you. Our contact information is below.

Disability Resource Center (DRC)
(877) 591-4723 (select option 4)
(877) 520-8916 (fax)
drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the [full academic honesty policy](#).

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the [full copyright policy](#).

SNHU College of Online and Continuing Education Withdrawal Policy

Review the [full withdrawal policy](#).

Southern New Hampshire University Policies

More information about SNHU policies can be found on the [policy page](#).