



Undergraduate Course Syllabus

IT 215: Introduction to SAS

Center: Online

Course Prerequisites

IT 145 and IT 204

Course Description

The SAS programming suite of products is commonly used throughout the industry for making sense of the vast amount of data that is available today and for turning that data into actionable items for an organization. Through the creation of SAS programs of varying complexity, students will solve common data analysis problems and learn the general programming conventions of SAS along with the data management and reporting utilities of the basic SAS product. This course will also provide students with an overview of the wide array of SAS data analytics products and their use within various industries.

Course Outcomes

- Navigate SAS programs by identifying key structural features and utilizing online resources
- Import, export, and merge data using appropriate SAS methods
- Apply functions, conditional logic, and iteration to SAS datasets
- Present summarized data by accurately applying SAS data manipulation techniques
- Debug SAS programs by identifying and correcting syntax and logic errors
- Develop logically organized programs that address specific goals

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.

SAS Essentials: A Guide to Mastering SAS for Research

Alan Elliot and Wayne Woodward

John Wiley and Sons, Inc.

First Edition

2010

978-1-118-90056-7

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 Discussion | 1 | 20 | 20 |
| Module Exercises | 11 | 50 | 550 |
| Final Project | | | |
| Milestone One | 1 | 50 | 50 |
| Milestone Two | 1 | 50 | 50 |
| Milestone Three | 1 | 50 | 50 |
| Final Project | 1 | 300 | 300 |
| | | Total Course Points: | 1,020 |

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: Undergraduate

| <i>Total Points: 1,020</i> | | | | |
|----------------------------|--------------------------------|---------------|--------------------------|--------------|
| Grade | Numerical Equivalent | Points | Points Equivalent | |
| | | | <i>Lower</i> | <i>Upper</i> |
| A | 93-100 | 4 | 949 | 1020 |
| A- | 90-92 | 3.67 | 918 | 948 |
| B+ | 87-89 | 3.33 | 887 | 917 |
| B | 83-86 | 3 | 847 | 886 |
| B- | 80-82 | 2.67 | 816 | 846 |
| C+ | 77-79 | 2.33 | 785 | 815 |
| C | 73-76 | 2 | 745 | 784 |
| C- | 70-72 | 1.67 | 714 | 744 |
| D+ | 67-69 | 1.33 | 683 | 713 |
| D | 60-66 | 1 | 612 | 682 |
| F | 0-59 | 0 | 0 | 611 |
| I | Incomplete | | | |
| IF | Incomplete/Failure* | | | |
| IP | In Progress (past end of term) | | | |
| 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 | Introduction to SAS and the SAS Programming Environment <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapters 1 and 2 1-1 Discussion: Getting Started 1-2 Exercise: SAS Web Editor Programming Interface and SAS Code Description 1-3 Exercise: Exploring SAS Documentation |
| 2 | Working With Data in SAS 1 <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapters 2 (pp. 23-45), 3, 4 (pp. 73-85), and 5 2-1 Exercise: Converting Datasets 2-2 Exercise: Exporting Data from SAS to Other Formats |
| 3 | Working with Data in SAS 2: Combining Datasets and Conditional Processing <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapters 4 (pp. 86-108), 16 (pp. 359-364) 3-1 Discussion: Coding Assignments 3-2 Exercise: Multiple SAS Datasets |
| 4 | Summarizing SAS Data <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapters 6 and 7 4-1 Exercise: Summarizing Data 4-2 Final Project - Milestone One: Summary of Practice Operations |
| 5 | Analyzing SAS Data 1 <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapters 8 and 9 5-1 Exercise: Statistical Analysis 1 |
| 6 | Analyzing SAS Data 2 <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapter 10 |

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|---|--|
| | 6-1 Exercise: Debugging Code 6-2 Exercise: Statistical Analysis 2 6-3 Final Project - Milestone Two: Statistical Analysis of Performance on Diabetes Care |
| 7 | Graphing Data in SAS <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapter 14 7-1 Exercise: Graphing Data 7-2 Final Project - Milestone Three: Summary Graphs 7-3 Final Project |
| 8 | Advanced Topics <i>SAS Essentials: A Guide to Mastering SAS for Research</i> , Chapter 16 8-1 Exercise: Advanced Topics |

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](#).