

Undergraduate Course Syllabus

DAT 210: Foundation of Data Analytics

Center: Online

Course Prerequisites

None

Course Description

The emergence of new data sources is transforming the role of the data analyst from one who simply reports information to one who is charged with making sense of the available data and distilling from it the salient aspects for the given audience. In this course, students will examine the concepts of data analysis and how it informs the business process. Emphasis will be placed on the development of sound research questions, the identification and verification of data sources, the retrieval, cleaning, and manipulation of data, and the process for identifying the data elements that are relevant for a given audience. An overview of the regulatory organizations that govern the release of data will also be reviewed.

Course Outcomes

- Analyze the concepts of data analysis and apply them to foundational business processes
- Develop sound research questions around identified issues that allow for the creation of successful solutions
- Identify possible solutions to business problems by applying appropriate data sources to research
- Determine the applicability and reliability of data sources for problem-oriented research questions
- Recommend the tools and techniques of data retrieval, cleansing, and manipulation of data needed for various business problems effectively to various audiences
- Analyze the relevant regulations concerning the retrieval and usage of data in various industries

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through the <u>SNHU</u> <u>Online Bookstore</u> rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the IT Service Desk, your advisor, and the instructor can provide you with support if you have problems.

Research Methods for Business: A Skill Building Approach
Sekaran, U. & Bougie, R.
John Wiley & Sons, Inc.
8th Edition

ISBN: 978-1-119-56122-4

Diversity, Equity, and Inclusion

As indicated in our core values, SNHU is committed to "embrace diversity where we encourage and respect diverse identities, ideas, and perspectives by honoring difference, amplifying belonging, engaging civilly, and breaking down barriers to bring our mission to life."

This may or will be reflected in SNHU's curriculum as we embrace and practice diversity, equity, and inclusion (DEI) to provide the most transformative experience for our students, faculty, and staff. Because topics pertaining to DEI can be sensitive, please remember that embodying and practicing diversity, equity, and inclusion is one of our core values that you will encounter throughout the academic experience. In higher education, we are expected to think and engage critically. Use a growth mindset to embrace the diverse readings, course assignments, and experiences of your peers and faculty.

For more information about DEI at SNHU, please visit our website at the Office of Diversity and Inclusion.

Instructor Availability and Response Time

Your class interaction with the instructor and your classmates will take place on a regular, ongoing basis. Your instructor will be actively engaged within the course throughout the week. You will normally communicate with your instructor in the weekly discussions or the General Questions discussion topic so that your questions and the instructor's answers benefit the entire class. You should feel free, however, to communicate with your instructor via SNHU email at any time, particularly when you want to discuss something of a personal or sensitive nature. Your instructor will generally provide a response within 24 hours. Instructors will post grades and feedback (as applicable) within seven days of an assignment's due date, or within seven days of a late submission.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	5	40	200
Short Paper	1	50	50
Exercises	3	50	150
Final Project			
Final Project Milestones	5	40	200
Final Project Submission	1	400	400
	1	1	Total Course Points: 1,000

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.

Grade	Numerical Equivalent	Points
Α	93–100	4
A-	90–92	3.67
B+	87–89	3.33
В	83–86	3
B-	80–82	2.67
C+	77–79	2.33
С	73–76	2
C-	70–72	1.67
D+	67–69	1.33
D	60–66	1
F	0–59	0
I	Incomplete	
IF	Incomplete/Failure *	
IP	In Progress (past end	
	of term)	
W	Withdrawn	

^{*} Please refer to the <u>policy page</u> for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Assignment Guidelines and Rubrics section of the course.

Weekly Assignment Schedule

All reading and assignment information can be found within each module of the course. Assignments and discussion posts during the first week of each term are due by 11:59 p.m. Eastern Time. Assignments and discussion posts for the remainder of the term are due by 11:59 p.m. of the student's local time zone.

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

Module	Topics and Assignments
1	A Systematic Approach to Analyzing Business Problems and Opportunities
	Research Methods for Business: A Skill Building Approach, Chapter 1 (pp. 1-5), Chapter 2, and Chapter 6
	(pp. 94-99)
	1-1 Discussion: Business Opportunities and Hypotheses
	1-2 Submission: Final Project Milestone One

Module	Topics and Assignments
2	Developing Sound Research Questions
	Research Methods for Business: A Skill Building Approach, Chapters 3 (pp. 34-37, 40, and 46-48), Chapter
	4, and Chapter 5
	2-1 Discussion: Sound Research Questions
	2-2 Short Paper: Case Study
3	Sources and Types of Data
	Research Methods for Business: A Skill Building Approach, Chapter 8 and Chapter 13 (pp. 201-206)
	3-1 Exercise: Create and Distribute an Online Survey
	3-2 Discussion: Survey Results
	3-3 Submission: Final Project Milestone Two
4	Relevance and Applicability of Data
	Research Methods for Business: A Skill Building Approach, Chapter 10
	4-1 Exercise: Questionnaire Analysis
	4-2 Submission: Final Project Milestone Three
5	Review Methods for Different Business Opportunities
	Research Methods for Business: A Skill Building Approach, Chapter 7 and Chapter 15 (pp. 254-260)
	5-1 Discussion: Selecting Appropriate Research Strategies
	5-2 Submission: Final Project Milestone Four
6	Technology and Tools
	Research Methods for Business: A Skill Building Approach, Chapter 15 and Chapter 16 (pp. 302-303)
	6-1 Exercise: Introduction to Visuals using a Data Visualization Tool
	6-2 Submission: Final Project Milestone Five
7	The Research Report
	Research Methods for Business: A Skill Building Approach, Chapter 19 and Chapter 13 (pp. 209-214)
	7-1 Submission: Final Project
8	Further Exploration
	Research Methods for Business: A Skill Building Approach, Chapter 16
	8-1 Discussion: Perception of Data Presentation Methods

Course Participation

Course participation is required within the first week of the term for all online courses. *Participation* in this context is defined as completing one graded assignment during the first week of the course. Otherwise, students will be administratively removed for nonparticipation. Students who do not participate during the first week may forfeit their rights to be reinstated into the course. Students who stop attending a course after the first week and who do not officially withdraw will receive a grade calculated based on all submitted and missed graded assignments for the course. Missed assignments will earn a grade of zero. See the <u>course withdrawal policy</u> and the <u>full attendance policy</u> for further information.

Late Assignments

Students who need extra time may submit assignments (excluding discussion board postings) up to one week after the assignment due date. Discussion board submissions will not be accepted for credit after the deadline except in extenuating circumstances.

- A penalty of 10 percent of the total value of the assignment will be applied to the grade achieved on the late assignment regardless of the day of the week on which the work is submitted.
- Students who submit assignments more than one week late will receive a grade of zero on the assignment unless they have made prior arrangements with the instructor.

Students must submit all assignments no later than 11:59 p.m. (in their own time zone) on the last day of the term. No assignments are accepted after the last day of the term unless an incomplete has been submitted. See the incomplete grades policy.

There may be times an instructor makes an exception to the late assignment policy. Instructors may accept late work, including discussion board posts, with or without prior arrangement.

- Exceptions to the late policy on these grounds are left to the instructor's discretion, including whether the late penalty is applied or waived. Students should not assume that they will be allowed to submit assignments after the due dates.
- If an instructor finds that they are unable to determine whether an exception to the late policy would be appropriate without documentation, the collection and review of student documentation should be handled through the Dispute Resolution team in order to protect the student's privacy. In these cases, students should file a Student Concern Dispute form to have the circumstances reviewed.

If a student is experiencing (or knows they will experience) a circumstance, including pregnancy, that is protected under the Americans with Disabilities Act or Title IX, they are encouraged to contact the Online Accessibility Center (OAC) as soon as possible to explore what academic accommodations might be offered. Instructors must honor all deadlines established through the OAC.

Student Handbook

Review the student handbook.

ADA/504 Compliance Statement

Southern New Hampshire University (SNHU) is dedicated to providing equal access to individuals with disabilities in accordance with Section 504 of the Rehabilitation Act of 1973 and with Title III of the Americans with Disabilities Act (ADA) of 1990, as amended by the Americans with Disabilities Act Amendments Act (ADAAA) of 2008.

SNHU prohibits unlawful discrimination on the basis of disability and takes action to prevent such discrimination by providing reasonable accommodations to eligible individuals with disabilities. The university has adopted the ADA/504 Grievances Policy (version 1.2 effective October 16, 2017), providing for prompt and equitable resolution of complaints regarding any action prohibited by Section 504 or the ADA.

For further information on accessibility support and services, visit the <u>Disability and Accessibility Services</u> webpage.

Academic Integrity 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 <u>full academic integrity policy</u>.

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 <u>full copyright policy</u>.

Withdrawal Policy

Review the <u>full withdrawal policy</u>.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.