



CAROLINA
UNIVERSITY

BIostatistics MPH 635 (80) Spring Session II 2026 Syllabus

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Carolina University Mission Statement

We are a Christ-centered university committed to student success.

Course Information

Course Prerequisites

MPH 505- Epidemiology

MPH 501- Introduction to Public Health

MG 210- Introduction to Statistics

Course Description

3 Credit Hours

In this two-course series, students will learn how the relationship between exposure and disease is evaluated. For example, how the severity of heavy metal poisoning symptoms depends on the amount and number of heavy metals in the blood, or how the relationship between poor air quality and asthma are measured. Using an integration of statistics and analytic techniques on historical and current public health and epidemiological data, students will learn how to compile, analyze and interpret public health information to track health trends. Sources of public health surveillance data may include vital statistical records, public medical records, personal interviews, surveys, and data from laboratory testing.

Course Delivery and Methods

The course will use textbook reading, professor's lectures/PowerPoints, and students' interaction through discussions, web tours, and peer-reviewed projects.



Course Learning Outcomes

Upon completion of this course, students will be able to:

1. Demonstrate importance of Biostatistics in public health and learn to apply statistical methods appropriately to analyze public health data, including descriptive statistics, inferential statistics, regression analysis, and survival analysis.
2. Understand fundamental biostatistical concepts e.g., probability theory, distribution, hypothesis, testing and confidence interval etc.
3. Understand epidemiological data using biostatistical techniques, including diseases frequency, Inferential statistics, measure of association and study design consideration
4. Apply knowledge to write research study capstone project paper and utilize statistical software packages e.g., R, SAS, SPSS proficiently to perform data manipulation, analysis and visualization.

Course Resources

Required Texts:

Essentials of Biostatistics in Public Health. Lisa M. Sullivan (2023). 4th Edition ISBN # 9781284288735. Jones & Bartlet.

Required Resources:

Additional journal articles will be provided by the professor throughout the course.

Recommended Resources:

Not Applicable



Course Requirements and Assignments

Cornell Note Taking

Students will upload handwritten Cornell Notes (format) provided in the coursework resources tab. This is worth 5 points included in the final grade.

Group Discussions

Discussion will be held online. Students will be graded based on their participation in discussion board.

Deliverables

Deliverables are defined as assignments. The deliverables include project proposals, literature review, methodology/ design, data analysis, and abstract.

Quizzes

Weekly quizzes will be administered via eLearning.

Final Exam

The Final Project will be a culmination of the material covered within this course. Students are expected to submit a paper written in APA format or a PowerPoint (11-15 slides) Project adding the material covered. Students will present their Projects virtually in front of professors professionally.

Course Schedule

Quiz Schedule

Quiz 1: Mar 22
Quiz 2: Mar 29
Quiz 3: Apr 05
Quiz 4: Apr 12
Quiz 5: Apr 19

Deliverables Schedule

Project Proposal: Mar 22
Literature Review: Mar 29
Methodology: Apr 05
Design/Analysis: Apr 12
Abstract: Apr 19

Final Project Deadline

Final Project: Apr 26

Course Specific Policies



Cornell notes must include all the information provided in the resources tab and lectures/PowerPoints provided on the course shells. If you submit one page, make sure you cover every aspect of the information provided in resources tab each week.

Submit work/assignments weekly by Sunday. Communicate via email with the professor ahead of time for late assignment submission or absence in class. Participation in class is essential for discussion and peer marking. Do not use AI for your deliverables or Final Project writing.

Use of Artificial Intelligence

The use of generative AI tools is permitted in this class for the following activities:

- Brainstorming and refining ideas
- Fine-tuning research questions
- Finding information on a topic
- Drafting an outline
- Checking grammar and style
- AI-specific assignments (per the provided instructions)

The use of generative AI tools is not permitted for the following activities:

- Impersonation in classroom context (e.g. composing discussion board posts)
- Completing group work
- Writing a draft of a writing assignment
- Writing entire sentences, paragraphs, or papers to complete class assignments



Course Grading

Assignment Type	Weight
Cornell Notes	5%
Discussion Group	10%
Quizzes	25%
Deliverables	25%
Final Project	35%
Total	100%

Course Assessment Mapping

Assessment Type	Objective(s) Met
Hand-Written Cornell Notes content	1~3
Participation	1~3
Deliverables	1~3
Quizzes	1~4
Final Project Presentation	4
Total	1~4



University Grading Scale

Grade	Point Value	Range	
		Undergraduate	Graduate
A	4	94-100	96-100
A-	3.7	90-93	93-95
B+	3.3	87-89	90-92
B	3	83-86	87-89
B-	2.7	80-82	85-86
C+	2.3	77-79	82-84
C	2	73-76	79-81
C-	1.7	70-72	77-78
D+	1.3	67-69	74-76
D	1	60-66	70-73
F	0	<60	<70



Professional Interaction & Communication

- Please use email whenever possible. Only university email and related systems should be used for institutional communications. Do not use personal email or video conferencing accounts.
- Email should be checked regularly, especially when enrolled in an active course.
- Use subject lines appropriately. It is helpful to include the name of the course (including sections) whenever possible. Avoid using the subject line as the body of the email—include full details in the message itself to ensure clear communication.
- Refer to professors and CU employees by their last names with appropriate honorifics (e.g., “Dr.” or “Professor”).
- University communications (including emails and discussion board posts, etc.) should not resemble text message, chat, or social media posts. Use complete sentences with correct capitalization, spelling, punctuation, and grammar.
- Throughout an active course, faculty should respond to all emails and voicemail messages within 24 hours.
- Faculty and staff are not obligated to respond to communications where these guidelines are not followed.
- Grading of assignments and substantive feedback is to be done within 3 days for regular assignments (this includes attendance) and 7 days for larger assignments.
- Some assignments may require additional time to grade due to the length of the project and the directive to provide substantive feedback that will assist you throughout the learning process. In cases where the assignment is not returned with feedback within the stated period, refer to communication from your professor to facilitate expectations on subsequent assignments. Students are not expected to apply adjustments on subsequent assignments in advance of returned grading and feedback.
- When participating in classes or meetings, be on-time and mentally present. Dress according to classroom standards and conduct yourself in a professional manner. Do not introduce distractions into the class and be prepared to stay for the duration of the session per normal classroom behavior.



Appeals & Complaints

Informal Resolution

Carolina University seeks to provide an excellent educational experience for all students. If a student wishes to make a complaint of an academic nature, in the first instance, they should seek to resolve the matter by informal discussion with the faculty member.

If the discussion is in person, it is recommended that the student follow up with an email summarizing the discussion (complaint and resolution if one is reached).

If the discussion with the faculty member does not resolve the issue, the student may also contact your school dean. If your professor is the dean, the next step is to begin the formal resolution process.

Formal Resolution

If informal discussions do not resolve the matter, students have the right to file a formal complaint. The university's academic catalog includes a detailed description of processes for submitting [grade appeals](#) or [academic complaints](#) that range from teaching, learning, assessment, grading, or student performance in a course. While these processes differ, both are time-sensitive and begin with timely communication with the faculty member.

Grade appeals must be initiated with the faculty member within 5 days of the awarding of the grade or status. Both grade appeals and academic complaints must be filed within 7 days of the awarding of grade or status or after the events that are alleged to have caused the complaint. In either case, supporting evidence will be required. The processes are fully outlined in [the academic catalog](#) and include links to the appropriate forms.



Course Attendance and Participation

All courses follow specific attendance policies found in the [Academic Catalog](#) for that course level and format. Attendance and participation may be used by instructors to determine a portion of a student's grade for a particular course. Whereas attendance is typically defined by statuses identifying a student's presence in a class, participation typically includes the assessment of activity within that course. In some cases, the methodology, subject matter, learning environment, or other factors may require attendance.

Attendance for online courses will be gauged by regular academic engagement. Students should refer to the course syllabus for the course's grade weighting table and course-specific policies regarding the grade percentages attributable to each component in a course, which may include attendance and participation.

Active participation is a central component of all Carolina University courses. For online students, participation goes beyond simply logging in; it requires meaningful engagement with course materials, consistent contributions to discussion boards, interaction with peers, and communication with faculty.

Students are expected to post substantive responses to regularly assigned prompts and to engage respectfully with their classmates' ideas. A "substantive" post goes beyond agreement or disagreement and demonstrates critical thinking, application of course concepts, and integration of evidence or examples.

Substantial peer interaction is essential to the learning process in an online environment. Students must respond to classmates' posts by providing feedback, asking questions, or extending the conversation. In addition, regular communication with the course instructor is expected, whether through questions or follow-up on feedback. Professionalism, collegiality, and academic integrity should guide all student-to-student and student-to-faculty interactions. Students are responsible for viewing all assigned lectures and course materials in a timely manner. This content serves as a foundation for class discussions and assignments, and students are expected to demonstrate familiarity with lecture content in their contributions and coursework.

Participation requires engaging in discussions and viewing lectures within the assigned timeframe to foster active, ongoing conversation. Late or inconsistent participation disrupts peer learning and may not receive credit.



Disability Assistance

Carolina University welcomes students, faculty, staff and visitors with disabilities to our campus and to our programs. Our goal at CU is to ensure an accessible, inclusive welcoming learning and working environment for individuals with disabilities while complying with federal and state regulations.

Students with disabilities are encouraged to reach out to University Accessibility Services (UAS) as soon as possible to explore possible accommodations. UAS serves as a central resource on disability-related information, procedures and services for the university community and partners will work with the student and any other campus partners to identify barriers and implement plans for access. More information about UAS can be found at <https://carolinau.edu/university-accessibility-services>

Academic Integrity and Misconduct

The Student Handbook has a detailed list of different ways students show a lack of academic integrity, including academic technology misuse, cheating, complicity, fabrication or invention, falsification, forgery, multiple submissions, plagiarism, and sabotage.

Academic integrity is the honest and responsible conduct of studies, scholarship, research, information collection, and presentation. The university expects students to submit assignments that are original to them and to properly cite and reference other peoples' ideas using the prescribed style guide. The very foundation of a good university education is academic integrity. Learning how to express original ideas, cite sources, work independently, and report results accurately and honestly are skills that carry students beyond their academic careers. If a student is uncertain about an issue of academic honesty, they should consult the faculty member to resolve questions in any situation prior to the submission of the academic exercise.

Maintaining your academic integrity involves:

- Creating and expressing your own ideas in course work.
- Acknowledging all sources of information including verbal, written, digital, and graphic.
- Completing assignments independently or acknowledging collaboration.
- Attending classes, exams, and required academic events.
- Accurately reporting results when conducting your own research.
- Honesty during examinations.
- Not tampering with or misusing technology.
- Not aiding or abetting other students in violating any academic rules or policies.

Courses at Carolina University will utilize proctoring for select exams to ensure exam integrity. Per Carolina University directives, all exams that represent 25% or more of a course grade are required to be proctored. Instances of cheating or inappropriate behavior will be considered violations of the Academic Integrity policy and will result in disciplinary action.

Plagiarism is the use of another person's distinctive ideas or words without acknowledgment. All researchers are expected to acknowledge the use of another author's words by the use of quotation



marks around those words in the text of a paper and by appropriate citations. Plagiarism can occur in an oral, written, or media project submitted for academic credit or for some other benefit.

Examples of plagiarism include (but are not limited to), the following:

- Word-for-word copying of another person's ideas or words;
- Mosaic (interspersing of one's own words here and there while, in essence, copying another's work);
- Paraphrasing without citation (the rewriting of another's work, yet still using their fundamental idea or theory);
- Submission of another's work as one's own;
- Having another person write a paper;
- Buying or procuring a ready-made paper from a research paper "service" on the Internet or from another such service;
- Neglecting quotation marks on material that is otherwise acknowledged;
- Fabrication of references (inventing or counterfeiting sources)

BIBLIOGRAPHY

Not Applicable.