# Research Methods and Statistical Analysis in Criminal Justice

**CRJU 3002 B**

**Department of Criminal Justice**

**College of Arts & Letters**

**University of North Georgia**

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Office: 329 Hansford Hall  
Office Hours: Monday, Wednesday, Friday 8:50 AM – 9:50 AM  
Tuesday, Thursday 8:50 AM – 10:20 AM  
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## PREREQUISITES

CRJU 1100 and MATH 2400

## TEXT BOOKS


*Note: All exams are based on this version of the text. Use of an earlier version is at student's own risk.*


## COURSE DESCRIPTION

This is an introductory research methods and statistical analysis course. Its purpose is to familiarize students with the study design, data collection, operationalization, and statistical analysis of research specific to the criminal justice sciences. Students will engage in elementary descriptive and inferential statistics, bivariate analysis, and some multivariate analysis techniques. They will acquire skills in creating research-based criminal justice projects, perform computer-analysis of data, and prepare a presentation of their findings.

## COURSE OBJECTIVES

- Create a testable hypothesis and design a research methodology related to policy or practice in criminal justice
- Analyze the strengths and weaknesses of data collection methods, and use quantitative data to make inferences about a specified population based on statistics from a sample
- Evaluate potential ethical issues in scientific research, and assess qualitative research for scholarship, validity, and reliability
- Apply data-analysis techniques to specific populations to test hypotheses applicable to policy formulation in the criminal justice sciences

*Note: If you need this document in another format, please email Dr. Balemba at samantha.balemba@ung.edu or call 706-864-1871.*
METHOD OF INSTRUCTION

In-class lectures

EVALUATION METHODS

Exam 1 15%
Exam 2 15%
Exam 3 15%
Exam 4 (Final Exam) 15%
Research Proposal 20%
Assignments 20%

90 – 100% = A
80 – 89.9% = B
70 – 79.9% = C
60 – 69.9% = D
≤ 59.9% = F

LATE ASSIGNMENTS AND PROPOSALS WILL NOT BE ACCEPTED. Additionally, there will be NO MAKE-UPS FOR MISSED EXAMS. If you anticipate a problem with any deadline or exam, come talk to me at least TWO WEEKS BEFORE the affected deadline or exam.

ASSIGNMENTS

Assignments will consist of short questions specific to the statistics portion of the course material. Each assignment will be released the week prior to its deadline. You will submit a Word document or PDF with your answers for each question (which will usually either be numerical or a short sentence or statement).

LATE ASSIGNMENTS WILL NOT BE ACCEPTED.

RESEARCH PROPOSAL

You will each write a research proposal, which is essentially a proposal to conduct research in the future (that is, you have not yet conducted the research). For this proposal in particular, you will not actually be conducting the research you propose (at least not within the confines of the current course), so you do not have to make it something that you would actually be able to complete. Thus, while you cannot assume unrealistic resources (such as all of the police departments in the state agreeing to run your experiment for the next 5 years), you have some leeway about what you can do.

More information about proposal specifics will be provided in the first lecture and on D2L.

LATE RESEARCH PROPOSALS WILL NOT BE ACCEPTED. This means that your proposal MUST be in by MONDAY, NOVEMBER 16th at 4:00 PM.
ATTENDANCE POLICY

Per university policy, once you reach three documented absences in this course for any reason (~10% of course meetings), I will initiate a class withdrawal. If this occurs prior to the midpoint of the term, a W will be entered. If this occurs after the midpoint of the term, a WF will be entered. Students that are unable to attend class due to university-sponsored events must notify me prior to leaving for the event in writing and meet with me during office hours (or at a scheduled appointment) in order to avoid being counted absent for the event. You are given two absences to use prior to being withdrawn from the course. These are intended to be used for sickness, family issues, work, etc. I do not require documentation for these issues.

SUPPLEMENTAL SYLLABUS

Students are expected to refer to the Supplemental Syllabus for the following information:

1. Academic Exchange
2. Academic Integrity Policy
3. Academic Success Plan Program
4. Class Evaluations
5. Course Grades and Withdrawal Process
6. Disruptive Behavior Policy
7. Inclement Weather
8. Smoking Policy
9. Students with Disabilities

The supplemental syllabus can be located at:
http://ung.edu/academic-affairs/policies-and-guidelines/supplemental-syllabus.php

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Incidents of academic dishonesty are taken very seriously. Cheating on tests or assignments will result in an automatic 0 for the test/assignment as well as a possible F in the course and the filing of an incident report. Plagiarism will also not be tolerated, and can include intentional use of another’s work without proper citation as well as using material already prepared and/or submitted for another course. If you have any questions or concerns about this policy, please come talk to me BEFORE submitting potentially dishonest work.
COURSE SCHEDULE

WEEK 1: August 17th – 21st
CRIMINOLOGICAL INQUIRY – WHY DO RESEARCH AT ALL?
The Foundations and Purposes of Research
READING: Bachman & Schutt (2014), Ch. 1

WEEK 2: August 24th – 28th
RESEARCH DESIGN AND THEORY DEVELOPMENT IN CRIMINOLOGY – WHAT TO DO AND WHAT NOT TO DO
Theory Building and the Process of Research
READING: Bachman & Schutt (2014), Ch. 2

INTRO TO STATS
READING: Williams (2009), Ch. 1

WEEK 3: August 31st – September 4th
CODE OF ETHICS IN CRIMINOLOGICAL RESEARCH – FIRST, DO NO HARM!
Tenets and Issues of Research Ethics
READING: Bachman & Schutt (2014), Ch. 3

WEEK 4: September 7th – 11th
No readings for this week. Just catch-up and studying!

September 7TH: No class (Labor Day)

EXAM 1 – THURSDAY, SEPTEMBER 10th (B&S: Chapters 1-3; W: Chapter 1)

WEEK 5: September 14th – 18th
CONCEPTUALIZING, OPERATIONALIZING, AND MEASURING – HOW DO WE DO WHAT WE DO?
Defining and Measuring Concepts and Variables
READING: Bachman & Schutt (2014), Ch. 4

LEVELS OF MEASUREMENT
READING: Williams (2009), Ch. 2
WEEK 6: September 21st – 25th
QUANTITATIVE DATA INTERPRETATION: STARTING TO PUT IT TOGETHER
First Steps in Quantitative Data Analysis
READING: Bachman & Schutt (2014), Ch. 13

GRAPHICS, CENTRAL TENDENCY, AND DISPERSION
READING: Williams (2009), Ch. 3-5

WEEK 7: September 28th – October 2nd
SAMPLING – WHO DO WE CARE TO KNOW ABOUT?
Probabilistic and Nonprobabilistic Sampling Methods
READING: Bachman & Schutt (2014), Ch. 5

CURVES AND DISTRIBUTIONS
READING: Williams (2009), Ch. 6

ASSIGNMENT 1 DUE FRIDAY, OCTOBER 2nd BY 4:00PM!!!

WEEK 8: October 5th – 9th
No readings for this week. Just catch-up and studying!

EXAM 2 – THURSDAY, OCTOBER 8th (B&S: Chapters 4, 5, & 13; W: Chapters 2-6)

WEEK 9: October 12th – 16th
CAUSATION – CAN WE TRULY MEASURE THIS?
Designing Research to Address Causation
READING: Bachman & Schutt (2014), Ch. 6

FREQUENCY DISTRIBUTIONS AND CROSSTABS
READING: Williams (2009), Ch. 7 & 8

October 12th: Last day to drop class without a penalty

WEEK 10: October 19th – 23rd
EXPERIMENTS – HOW DO WE DESIGN EXPERIMENTAL RESEARCH?
Designing Experimental and Quasi-Experimental Research
READING: Bachman & Schutt (2014), Ch. 7

HYPOTHESES AND STATISTICAL SIGNIFICANCE
READING: Williams (2009), Ch. 9 & 10
WEEK 11: October 26th – 30th
No readings for this week. Just catch-up and studying!

EXAM 3 – THURSDAY, OCTOBER 29th (B&S: Chapters 6 & 7; W: Chapters 7-10)

WEEK 12: November 2nd – 6th
SURVEYS – HOW DO WE ASK QUESTIONS?
Survey Research and Questionnaire Development
READING: Bachman & Schutt (2014), Ch. 8

CHI-SQUARE
READING: Williams (2009), Ch. 11

ASSIGNMENT 2 DUE FRIDAY, NOVEMBER 6TH BY 4:00PM!!!

THURSDAY REGULAR CLASS CANCELLED
Office hours also cancelled Thursday and Friday.
(Because I’ll be representing UNG at a Georgia conference!)

WEEK 13: November 9th – 13th
QUALITATIVE METHODS –WATCHING AND LISTENING
Observing, Participating, and Listening
READING: Bachman & Schutt (2014), Ch. 9

t-TESTS
READING: Williams (2009), Ch. 12

WEEK 14: November 16th – 20th
RECORDS, CONTENT ANALYSIS, AND SECONDARY DATA – WHAT OTHER WAYS ARE THERE TO GET DATA?
Obtaining and Analyzing Other Sources of Crime Data
READING: Bachman & Schutt (2014), Ch. 10

ANOVA
READING: Williams (2009), Ch. 13

RESEARCH PROPOSALS DUE MONDAY, NOVEMBER 16TH BY 4:00PM!!!

THURSDAY REGULAR CLASSES CANCELLED!
Office hours also cancelled Wednesday through Friday.
(Because I’ll be representing UNG at an international conference!)
WEEK 15: November 23rd – 27th
BREAK!!!
No readings or assignments! Have a fun break!

WEEK 16: November 30th – December 4th
WRAPPING THINGS UP
No reading for this week. Just catch-up and studying!

ASSIGNMENT 3 DUE FRIDAY, DECEMBER 4th BY 4:00PM!!!

FINALS WEEK
TUESDAY, DECEMBER 8th – 10:20am-12:20pm
EXAM 4 (B&S: Chapters 8-10; W: Chapters 11-13)

Note: This schedule is a guide only. Some dates may be subject to change at the discretion of the instructor (dependent on how the course is progressing). Any such changes will be announced IN CLASS.

Reminder: LATE ASSIGNMENTS AND PROPOSALS WILL NOT BE ACCEPTED. Additionally, there will be NO MAKE-UPS FOR MISSED EXAMS. If you anticipate a problem with any deadline or exam, come talk to me at least TWO WEEKS BEFORE the affected deadline or exam.