



Institute of Criminology and Criminal Justice

CARLETON UNIVERSITY

Course Outline

COURSE:	Quantitative Research Methods in Criminology (CRCJ 3001 D)
TERM:	Winter 2021
PREREQUISITES:	CRCJ 1000 and third year standing in the B.A Honours program in Criminology and Criminal Justice
CLASS:	Day & Time: Mondays and Wednesdays, 8:30 am – 10:00 am Room: Online course with a mixture of synchronous and asynchronous meetings. We will be using Zoom for all the class meetings.
INSTRUCTOR: (CONTRACT)	Decky Kipuka Kabongi, Ph.D
CONTACT:	Office: All meetings, including for office hours, will be online. Office Hrs: By appointments Telephone: TBD Email: decky.kipukakabongi@carleton.ca

Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or Faculty of Public Affairs 20 Teaching Regulations 2020-21 as soon as possible after the need for accommodation is known to exist. For more details [click here](#).

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details [click here](#).

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520- 6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with me to

ensure accommodation arrangements are made. Please consult the [PMC website](#) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

Survivors of Sexual Violence

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit:

<https://carleton.ca/equity/sexual-assault-support-services>

Accommodation for Student Activities

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

COURSE DESCRIPTION: This course is designed to introduce you to the fundamentals of research process and statistical analysis in criminology and criminal justice. The topics covered in this course include the followings: development of research questions and hypotheses, selection of research participants, measurement and manipulation of variables, research strategies and designs, fundamental of descriptive and inferential statistics, and research ethics. At the end of the course, you should have the necessary skills to formulate good research questions and hypothesis, evaluate quantitative research and to conduct your own research.

The course will be divided into two sections. The first one will focus on learning the main steps of the research process. The second section will focus on the fundamental of statistical analysis. Both sections are mutually complementary, particularly for students who lack prior knowledge of research methodology in criminology and criminal justice. In the second part of the course, students will learn through practical cases (laboratory learning experience) how to conduct statistical analysis using available data on crime. Different sources of data on crime in Canada or in other countries will be provided to facilitate the learning process of statistical analysis.

During the second section of the course, students will learn practical skills to conduct statistical analysis through lab exercises using STATA, a statistical software commonly used in quantitative analysis to analyze, manage, and produce graphical visualizations of data. [Students will have to download STATA free of charge from Carleton University's Information Technology Services \(ITS\) webpage available here.](#)

REQUIRED TEXTS: The instructor will use both textbooks below to meet the learning objectives of this course. Students are expected to read the assigned chapters or sections for each topic as indicated in the course schedule.

1. **Gravetter, F. J., & Forzano, L.A. B. (2018). Research Methods for the Behavioral Sciences (6th ed.).** Wadsworth-Cengage Learning. ISBN-13: 978-1-305-10413-6. **This textbook is available for purchase/rent at the University's bookstore. Students can also use the 5th edition of the book (published in 2016) but are responsible for ensuring that they are reading the assigned topics.**
2. **Weisburd, David and Britt, Chetser. (2014). Statistics in Criminal Justice, 4th edition** (Boston, MA: Springer US). ISBN: 781461491705 (Online) and 9781461491699 (Print). This book is electronically available at Carleton's MacOdrum library.

EVALUATION: The table below indicates the components of the course evaluation. All components must be completed in order to get a passing grade. Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Term Work	%	Due Date
Assignment 1	10 %	January 25, 2021 by 6:30 pm
Assignment 2	15 %	February 12, 2021 by 6:30 pm
Assignment 3	20 %	March 17, 2021 by 6:30 pm
Class participation	10 %	See details below.
Research Proposal	45 %	April 19, 2021 by 6:30 pm

ASSIGNMENTS: There will be 3 assignments in this course. Students are encouraged to complete and submit their assignments on time. For the due dates of these assignments, consult the above table. The instructor will provide clear instructions for each assignment. Failure to follow the instructions may result in the loss of some points.

LATE ASSIGNMENTS: You are strongly encouraged to do your assignments early and submit them on the due dates. Late assignments will be docked 10% per day the assignment is late, including weekends (i.e., each day of the weekend counts as a full day). If an assignment is more than 3 days late, it will automatically receive a grade of 0% (zero percent). An assignment will be considered late if it is not fully submitted to the assignment portal on CuLearn by the time on the date it is due. Assignments that are submitted as a draft will not be accepted. The assignment must be submitted by 6:30 p.m. on the day of class in order for it to be considered on time. Assignments that are turned in *after 6:30 pm* on the due date will be considered one day late. Assignments that are turned in after 6:30 p.m. the following day will be considered two days late, and so on. Please note that assignments **will NOT** be accepted by email.

If you fail to submit an assignment (or any other term work) because of an illness, an injury, or other extraordinary circumstances beyond your control, you are responsible for informing the instructor as soon as possible and for making alternate arrangements to complete the missed work. In all cases this must occur no later than three (3) working days after the term work was due. The alternate arrangement must be made before the last day of classes in the term as published in the academic schedule. **If your assignment is late for medical reasons or if you seek an accommodation**, you do not need to produce a doctor's note or a medical certificate. Instead, you should complete the **Medical Self-Declaration** form available on the Registrar's webpage.

Class Participation: While students are strongly encouraged to attend all the synchronous class meetings (**see course schedule**), they need to understand that attendance alone is not enough to earn the participation mark. **Class Participation is understood as making substantive contributions to the class discussions. For example, students are expected to demonstrate that they have read the assigned course materials (book chapters) and are able to respond in a meaningful way to the instructor's questions. Students are also expected to ask questions and/or respond to peers' questions. Otherwise, no participation mark will be granted.** If a student cannot attend the online class meeting, he/she needs to notify, by email, the course instructor as soon as possible.

Research Proposal: Due to the ongoing COVID-19 pandemic related circumstances, this research proposal will be considered as the final exam and will be worth 45 %. **It is designed to give students the opportunity to demonstrate the research skills and knowledge learned in this course.** Specifically, you will have to write a research proposal on a specific topic related to criminology and criminal justice. **The paper must be your own work (see the statement on plagiarism below).** The proposal should discuss the following points: i) a clear research question, ii) the research hypothesis (no more than 3 hypotheses), iii) the research's variables and their measurement, iv) the research strategy and design you would consider to address the research question, v) how

you would select the research participants, including ethical issues (3 ethical issues max), vi) a brief literature review presenting the summary of two scholarly articles relevant to the research question you have identified, and vii) a summary of the source of data and preliminary statistical analysis. Students will submit this paper online via CuLearn. The paper should be no more than 10 pages long, double-spaced, Times New Roman /12 font size. **The instructor will have regular meetings with students through office hours to provide further clarification and address questions on this component of the evaluation. If you plan to miss this part of the course evaluation or to request a deferral, you must contact the Institute of Criminology and Criminal Justice or the Registrar's Office.**

GRADING SYSTEM: Letter grades assigned in this course will have the following percentage equivalents:

A+ = 90 -100	B+ = 77 - 79	C + = 67 -69	D + = 57 -59
A = 85 -89	B = 73 -76	C = 63 -66	D = 53 -56
A- = 80 -84	B- = 70 - 72	C - = 60 -62	D - = 50 -52
F = 0 – 49 = complete failure, no academic credit.			

STATEMENT ON PLAGIARISM: The University Senate defines plagiarism as “*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one’s own.*” This can include:

- reproducing or paraphrasing portions of someone else’s published or unpublished material, regardless of the source, and presenting these as one’s own without proper citation or reference to the original source;
- submitting a take-home examination, essay, laboratory report or other assignment written, in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, or paraphrased material, concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another’s data or research findings;
- failing to acknowledge sources through the use of proper citations when using another’s works and/or failing to use quotation marks;
- handing in "substantially the same piece of work for academic credit more than once without prior written permission of the course instructor in which the submission occurs."

Plagiarism is a serious offence that cannot be resolved directly by the course’s instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial; they can include a final grade of "F" for the course.

INTELLECTUAL PROPERTY: Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s). Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s).

COURSE SCHEDULE: This schedule serves as a guide and may be subject to change. The textbooks’ chapters will help you to better understand the lecture materials. You are expected to have read the corresponding chapter(s) prior to the class period for which it is assigned. Two days before the meeting, the instructor will send guiding questions for the topic (s) that will be discussed during the class meeting. You must read the assigned chapter(s) and find the right answers to the questions to better participate in the class discussion. In the schedule below, **GF** indicates the book by **Gravetter and Forzano (see first book on page 2)** and **WB** indicates the second book (by **Weisburd and Britt**). The instructor will post **lecture materials (slides and recordings) on**

CuLearn after the class meeting (synchronous meetings) or during the scheduled class time for asynchronous meetings.

Dates		Topics	Required readings
Week 1 Asynchronous Meetings	January 11, 2021	Course Overview Knowledge /Scientific Method Importance of Statistics	GF, chapter 1, pages 1-28 WB, chapter 1, pages 2-10
	January 13, 2021	Research Ideas and Hypotheses	GF, chapter 2, pages 29-50
Week 2	January 18, 2021 Synchronous	Defining and Measuring Variables (Measuring Crime)	GF, chapter 3, pages 51 - 69 WB, chapter 2, pages 13-30
	January 20, 2021 Asynchronous	Ethics in Research Research Participants	GF, Chapter 4, pages 81-106 GF, Chapter, pages 109-124
Week 3 Asynchronous Meetings	January 25, 2021	Research Strategies and Validity	GF, chapter 6, pages 127-156
	January 27, 2021	Experimental Design: Between Subjects Design	GF, chapter 8, pages 185-209
Week 4 Asynchronous Meetings	February 1 st , 2021	Experimental Design: Within Subjects Design	GF, chapter 9, pages 211-231
	February 3, 2021	Correlational Research Strategy Causality versus Correlation	GF, chapter 12, pages 295-31
Week 5	February 8, 2021 Asynchronous	Descriptive Research Strategy	GF, chapter 13, pages 313-340
	February 10, 2021 Synchronous	Descriptive Statistics: Presenting and Displaying Data	WB, chapter 36-56
Week of February 15 – 19, 2021		Winter Break – All courses are suspended.	
Week 6	February 21, 2021 Asynchronous	Descriptive Statistics: Measures of Central Tendency	WB, chapter 4, pages 66 – 86 GF, chapter 15, pages 374-380
	February 24, 2021 Synchronous	Lab # 1: Practical Exercise Using Stata for descriptive statistics: Find the Mean, Mode, Median	
	March 1 st , 2021 Asynchronous	Descriptive Statistics Measures of Dispersion	WB, chapter 5, pages 95 – 118 GF, chapter 15, pages 380 -388
	March 3, 2021 Synchronous	Lab # 2: Practical Exercise Using Stata for descriptive statistics: Finding Measures of Dispersion	
Week 7	March 8, 2021 Synchronous	Lab # 3: Practical Exercise Using Stata for descriptive statistics: Measures of Central Tendency and Dispersion	
	March 10, 2021 Asynchronous	Inferential Statistics: Introduction	GF, chapter 15.3, pages 289-411 Wb, chapter 6, pages 125 -140
Week 8 Asynchronous	March 15, 2021	Inferential Statistics Null Hypothesis and of Errors	GF, chapter 15.3, pages 289-411 Wb, chapter 6, pages 125 -140
	March 17, 2021	Inferential Statistics Basics of Binomial Distribution	Wb, chapter 7, pages 145 -164
Week 9	March 22, 2021 Synchronous	Lab # 4: Practical Exercise: Using Stata for inferential statistics	
	March 24, 2021 Asynchronous	Steps in Statistical Test and Chi-Square	WB, chapter 8, pages 171 -189 WB, chapter 9, pages 198-223
Week 10	March 29, 2021	Tests of statistical significance	WB, chapter 11, pages 269 -295

	Asynchronous	Comparison of Means of 2 Samples	WB, chapter 10, pages 234-261
	March 31, 2021 Synchronous	Lab # 5: Using Stata for Tests of Statistical Significance (WB, chapter 10, pages 234-261)	
Week 11 Asynchronous	April 5, 2021	Analysis of Variance (ANOVA)	WB, chapter 12, pages 306-329
	April 7, 2021	Measures of Association	WB, chapters 12 and 12
Week 12 Synchronous	April 12, 2021	Lab# 6: Stata for ANOVA analysis and measures of association	
	April 14, 2021 (Winter term ends)	Lab# 7: Basics of Linear Regression with Stata (WB, chapter 16, pages 440-470)	