

## Department of Criminology and Criminal Justice

### University of Maryland

CCJS 200: Introduction to Statistics in Criminology & Criminal Justice

Syllabus – Spring 2022

T & Th 9:30am-10:45am

MMH 1400

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#### Professor:

Dr. Sarah Tahamont

she/her

2220J LeFrak Hall

Email: [tahamont@umd.edu](mailto:tahamont@umd.edu)

#### Teaching Assistants

Madisen Placzkowski (she/her)

Sections Thursdays (101, 102, 104)

Email: [mplacz@umd.edu](mailto:mplacz@umd.edu)

Shuhao Zhang he/him

Sections Fridays (103, 105, 106)

Email: [zsh@umd.edu](mailto:zsh@umd.edu)

**Course Prerequisites:** CCJS100 or CCJS105 & 1 course with a minimum grade of C- from either STAT100, MATH107, MATH111, MATH120, MATH130, MATH135, or MATH140

**Course Overview:** This is an introduction to descriptive and inferential statistics. We will use criminal justice problems and questions to understand the basics of probability, estimation, confidence intervals, and statistical validity. You will learn and apply core concepts we need to study criminal justice, crime, its determinants, and its effects on our world using data. This course will prepare you to build on those skills in subsequent statistics coursework.

**Learning Objectives:** After successfully completing this course, you will be able to:

- Interpret statistical information given verbally, or by formulas, graphs or tables, and draw inferences from them
- Recognize and use connections within statistical methods and between statistics and the field of criminology and criminal justice
- Use statistical methods to inform criminal justice decisions and solve problems

#### Required Tools:

- **Calculator.** You need to bring a calculator that can take a square ( $x^2$ ) and square root ( $\sqrt{x}$ ) to lecture, discussion section, and exams. **You may not use a cell phone, tablet, laptop, or anything similar for any purpose during exams.**
- **Microsoft Excel.** Homework assignments and your final project will require use of Microsoft Excel. The TAs will explain how to use Excel for our purposes in discussion section, and key instructions for required analyses will be provided during lectures. TERPware provides Office 365 including Excel to students for no additional cost:  
<https://terpware.umd.edu/Windows/Title/3107>
- **Turning Point Clicker.**

**Supplementary Textbook:** Bachman RD, Paternoster R, Wilson TH (2022). *Statistics for Criminology and Criminal Justice (5<sup>th</sup> Edition)*. SAGE, Thousand Oaks, CA. ISBN # 9781544375687 (digital); 9781544375700 (hardcopy) **NOTE: This book is a great resource for supplemental practice problems and examples. However, you are responsible for the definitions and explanations provided in class in the materials provided for this course.**

**A note about *ELMS-Canvas*:** ELMS is an essential tool for this course, I expect you to be accessing the course page multiple times throughout the week. You will use it to take quizzes, locate your course materials, assignments, and grades. It has a copy of the syllabus. I will also be using *ELMS-Canvas* to make announcements. Please be sure you have access and that you are regularly monitoring the email account registered with the system.

**Campus Policies:** It is our shared responsibility to know and abide by the University of Maryland's policies that relate to all courses, which include topics like:

- Masking and safety requirements
- Academic Integrity
- Student and instructor conduct
- Accessibility and Accommodations
- Attendance and excused absences
- Grades and appeals
- Copyright and intellectual property

Please visit <https://www.ugst.umd.edu/courserelatedpolicies.html> for the Office of Undergraduate Studies' full list of campus wide policies and follow up with me if you have questions.

## Assessments

**Preparation Assessments:** With the exception of exam days, **BEFORE EVERY CLASS**, you will complete a pre-class assessment on ELMS. All but the lowest two of these assessments will count toward your final grade. The assessments are short and they will gauge your grasp of the material we are covering in the course. You will have up to two attempts on each prep assessment and your final score will be your best attempt.

**Problem Sets:** Everything I know about statistics, I learned doing a problem set.

Investing in the problem sets is an excellent strategy for success in any statistics course, this one included.

There will be four (4) problem sets assigned throughout the semester. Importantly, I consider problem sets to be professional work product. As a consequence, you should be attentive to instructions and follow them carefully. **YOU MUST SUBMIT YOUR PROBLEM SETS ON THE TEMPLATE PROVIDED.** Problem sets not submitted according to the instructions by the due date must be re-submitted, will be considered late and will be subject to the relevant penalties for late or missed work. Make sure your problem sets are legible and clearly labeled.

You are permitted to work in collaboration with your classmates to complete your problem sets, however you are responsible for turning in a complete problem set that is *entirely your own work*. My strong recommendation is that you attempt the entirety of a problem set on your own before you start to work with others.

**Mid-term Exams:** This class will have three in-class mid-term exams that will cover material from lectures and assigned course materials. Exams 2 & 3 will focus on the material covered since the prior exam. However, statistics by its nature is cumulative. Thus, the latter two exams draw upon prior material and, as a consequence, may be considered cumulative.

**NOTE: The exams will be closed book but open note! However, you will only be able to have access to your own paper notes during the exam (unless otherwise specified by ADS).**

**Final Empirical Paper (FEP):** The final paper for this class will require you to analyze data and write up your results in a final paper approximately 6 pages in length. This is to be submitted by 5/13 at 11:59pm. Final empirical papers must be turned in by the time they are due. Any paper not turned in by 12:05am on 5/14 will be considered late. Late papers will be penalized according to the policy on late/missed work below.

Final empirical papers must be typed, double-spaced, 12 pt. font, 1 inch margins and **turned in on ELMS**. Since final empirical papers will be graded anonymously, you should not include your name on the ELMS submission. F will **NOT** be accepted via email submission. Resources to assist with data analysis and writing can be found under Files>Final Empirical Project on ELMS. **NOTE:** Do NOT leave this until the last minute!

**Grading:**

Assignment	Percent
Preparation Assessments	3
Problem Sets	32
Midterm I	13
Midterm II	15
Midterm III	17
Final Empirical Paper	20
<b>Total</b>	<b>100</b>

To calculate final grades, weight the raw scores on your assignments by the percentage value above and sum the categories. I will round the percentage to the nearest whole number, rounding up at .5 (i.e. 86.49% will be a B and 86.5% will be a B+).

Percentage points will be converted to a letter grade as listed below:

A+ (97%+)	B+ (87-89%)	C+ (77-79%)	D+ (67-69%)	F (less than 60%)
A (93-96%)	B (83-86%)	C (73-76%)	D (63-66%)	
A- (90-92%)	B- (80-82%)	C- (70-72%)	D- (60-62%)	

**Participation Extra Credit Opportunity:** You will put yourself in the best possible position if you *actively* participate in the course. Throughout the semester there will be opportunities to earn extra credit “participation points” in both lecture and discussion section which will earn you extra credit points on your **final semester grade**. Here is how it works:

- Throughout the semester there will be 40 opportunities to earn a participation point
- At the end of the semester, I will take the total number of participation points you earned and divide by 32 to get your “participation weight.”
- I will then take your participation weight and multiply it by 1.5 and that will be the total extra credit (in percentage points) that I will add to your final semester grade.
- As you can see, there is lots of flexibility built in here. You **CANNOT** make up these participation points.

**Missing Class/Discussion:** We are all humans living through a pandemic. I hope you will not have to miss any lecture or discussion sessions, but if circumstances arise such that you cannot attend class you are responsible for catching up on the material. When possible, I will record the lecture sessions via Panopto and post them to ELMS. **Note:** It is not possible to guarantee lecture will be recorded and there is no way to make these a high quality production, but it’s the best we can do under the circumstances. Please also reach out to your TA for advice on how to catch up on any missed material.

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## Course Policies

**Academic Integrity:** It is essential that you follow guidelines for originality and attribution in your work. In brief, this means submitting your own work unless otherwise specified and properly citing source material you use to produce your work. A useful resource can be found at: <http://deanofthecollege.vassar.edu/documents/originality/originalityandattribution.pdf>

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. The Code sets forth the standards for conduct at Maryland for all students.

It should go without saying that cheating, plagiarism, or other violations of the University of Maryland Code of Academic Integrity will not be tolerated. Potential violations will be reported to the Honor Council. For more information on the Code of Academic Integrity or the Honor Council, see: <http://shc.umd.edu/SHC/Default.aspx>.

**Students with Disabilities:** I am willing to make necessary accommodations for students who are registered with the Accessibility & Disability Service (ADS) Office and who provide me with a University of Maryland ADS Accommodation letter that covers the Spring 2022 semester. This form must be presented to me by February 1, 2022 for all letters issued prior to that date. I am not able to accommodate students who are not registered with ADS or who do not provide me with documentation that has been reviewed by ADS. Students with ADS accommodation letters who are requesting to take their exams at the ADS Center need to provide me with a Test Authorization Form for each exam that must be turned in to me **no later than one week prior to each exam**. The student is expected to take the exam at the same time as the rest of the class.

If you have a condition that you believe may affect your ability to meet the course expectations, but do not have the associated documentation and accommodations through ADS, please contact ADS immediately so that you can get the accommodations you need. If you receive an ADS accommodation after February 1, 2022, you must provide it to me as soon as possible. We need to know **in advance** of an assignment due date to give us time to put the appropriate accommodations in place.

**Athletes:** Official athletic schedules must be submitted to me. Practices do not count as an excused absence; in cases of an excused absence (i.e. a game), students are expected to arrange with me make-up exams/assignments at least one week prior to scheduled due dates. It is the responsibility of the athlete to reconcile their athletic schedule with the course schedule and to notify me of potential conflicts so that we can make a plan. Athletes who miss exams/assignments due to games or other commitments, yet never submitted an official athletic schedule, and never spoke with me, will receive a grade of zero for the relevant assignment.

**Inclement Weather Policy:** If there is a weather emergency, I will inform the class of special circumstances and arrangements. You should assume that class is going forward as scheduled unless you hear otherwise from me or the University administration. Plan ahead so that you can still meet your class commitments safely. If you experience a weather related emergency, please contact your TA as soon as possible.

**Late or Missed Work:** Make sure you complete your assignments on time! Students will not be permitted to turn in late work without penalty or to make-up exams except in cases of academic accommodation in accordance with UMD policies for excused absences and ADS (see campus Attendance, Absences, or Missed Assignments policy for more information: <https://www.ugst.umd.edu/courselatedpolicies.html>).

Since the preparation assessments and problem sets can be completed over a period of time, late submissions will generally not be excused and will be subject to penalty. In case of an excused absence that makes it impossible to complete an assignment, you are responsible for the following:

**Procedures/Penalties for Late Work by Assessment Type:**

Assessment	Excused	Unexcused
Preparation Assessments	Contact your TA to make up the prep assessment <b>NO LATER THAN 1 WEEK</b> after your excused absence. Your TA will re-open the quiz for 1 week.	Unexcused missed prep assessments will receive a score of zero.
Participation Points	Participation points cannot be made up because they are entirely for extra credit.	Participation points cannot be made up because they are entirely for extra credit.
Problem Sets	Contact your TA and turn in your problem set ASAP, but <b>NO LATER THAN 1 WEEK</b> after your excused absence.	Unexcused late problem sets will lose 2/3 letter grade for each day the assignment is late. Unexcused problem sets more than 7 days late will not be considered and will receive a score of zero.
Midterm Examinations	<p>If you know you will be absent on the day of an exam you must notify me and your TA <u>via email</u> as soon as possible but no later than <b>ONE WEEK PRIOR</b> to the scheduled exam. You are expected to take the exam <b>PRIOR</b> to the scheduled exam date. Failure to do so will result in a “zero” grade for the exam.</p> <p>In the event of an emergency, please notify me and your TA <u>via email</u> as soon as possible and be prepared to provide documentation of your circumstance in accordance with University policy. Failure to provide adequate documentation of an emergency, will result in the late penalty as outlined under “unexcused.”</p>	Unexcused absences from midterms and/or failure to provide adequate documentation of the emergency that caused the student to miss the exam will result in a score of zero for the exam.
Final Empirical Paper (FEP)	Contact me and your TA <u>via email</u> as soon as possible to arrange an accommodation. Extensions for the FEP will not exceed one week past the due date. Failure to provide adequate documentation, will result in the late penalty as outlined under “unexcused.”	Unexcused late FEPs will lose 2/3 letter grade for each day the assignment is late. FEPs more than 7 days late will not be considered and will receive a score of zero.

**Addendum on Medical Absences:** The exams and the final empirical paper are considered Major Scheduled Grading Events and therefore the university medical excuse policy, which allows one student-signed honor statement attesting to illness, does **NOT** apply to them. In the event you become chronically absent, missing more than two consecutive weeks of class due to the same persistent illness, this must be verified by a health professional in writing and be brought to my attention in writing. Any absences from Major Scheduled Grading Events will be construed as zeros in the event you have failed to inform me of these developments and provide proper documentation **within one week of the assignment due date or exam date.**

**Religious Observances:** The University of Maryland policy on religious observances provides that a student will not be penalized because of observances of their religious beliefs; students will be given an opportunity, whenever feasible, to make up within a reasonable time any academic assignment that is missed due to individual participation in religious observances. When possible, assignments should be completed in advance of their due date. If your participation in class will be interrupted by a religious observance you should contact me well in advance to arrange an accommodation.

**Grade Disputes:** If you have questions or concerns about your grade(s) and believe it should be reviewed; you must submit a written request over email to me and your TA that describes your concern in detail. **This request must be submitted within one week of the day that the grades for the relevant assignment were disseminated.** Be advised that requests for a grade dispute review may result in the raising or lowering of the grade in question.

**E-mail and Technology: DO NOT EMAIL US THROUGH the ELMS Inbox.** You should email us directly at the addresses provided above. **You must include “CCJS 200” in the subject line of all emails to me or your TAs regarding this course.** It is a good habit to copy me and your TA on emails that you think either of us can answer. We will generally respond rather quickly to your emails, but there may be times when we are unable to do so. Save substantive questions for class, discussion section, or office hours.

**EMAIL CUTOFFS:** For every assignment, there will be a cutoff after which we will not be able to respond to email messages about the assignment right before it is due. Don't worry, there will be ample time to ask questions about the assignments in class, discussion and office hours prior to an assignment due date. **Be sure to ask your questions prior to the cutoff.**

Please keep your cell phones off or on silent during class.

Please do not take audio or video recordings of class sessions without my express consent and the consent of your classmates.

**Class Conduct:** I care about your safety and stress levels. We will endeavor to create a classroom space that is safe for all students. We are all expected to treat one another with respect. Students are expected to adhere to the Code of Student Conduct. For more information, see: <https://policies.umd.edu/policy/8f61058d-03a8-4b77-9f73-064ca5253542/>

**Masks in Class:** Throughout the semester we will wear facial coverings in accordance with University policy. Until further notice, University policy requires all individuals to wear a KN95 mask that covers their nose and mouth while indoors. Any student not in compliance with the University's Covid-19 safety guidelines may be in violation of the Code of Student Conduct, Part 10(e)(3): Failure to comply with a directive of University officials. **In accordance with University policy, provided there is adequate physical distance, I may teach some portions of class without my mask.**

**Course Expectations:** I expect all students to:

- a) Attend class regularly, on-time and prepared to learn! You should always bring a notebook, writing utensil and calculator with you to class and discussion section.
- b) Ask for clarification when you don't know what I'm saying. Seriously.
- c) Be prepared to answer and ask questions during class. We all learn better when we discuss the material instead of just listening to me talk.
- d) Be prepared to participate in in-class activities when asked.
- e) Attend your weekly discussion section & actively participate.
- f) Take responsibility for your own learning and ask for help!

**Weekly Discussion Section: You must attend the weekly discussion section to which you are assigned unless you have written permission from me and the TA.** Weekly discussion sections are designed to be an opportunity for you to review material from lecture, to discuss the course material and ask questions in a smaller group session. There will be a participation point available each week in discussion section, but you can only earn the participation point by attending your assigned discussion section unless you have written permission from me and the TA.

Please note that discussion section is not a lecture setting and the content will be largely driven by student questions about current and past material. Like problem sets, you will get out of discussion section what you put into it. Before discussion each week you should do the following:

1. Review class notes and come prepared with questions regarding the material.
2. Make sure you have started the current problem set and bring questions to help you complete it.

During discussion you should actively engage with your TA and your classmates in the joint enterprise of developing a firm grasp on the course material.

**Office Hours: Office hour availability for the instructional team is published on ELMS.** I strongly encourage you to take advantage of office hours throughout the semester. The TAs and I will hold weekly office hours, which are a wonderful opportunity for use to get to know each other better and for you to get some personalized learning time. If you cannot participate in office hours because of a structural impediment, you are welcome to request an appointment outside the hours listed on the syllabus, you will be asked to let us know why you cannot come to regular office hours.

I encourage you to take advantage of all of the types of office hours offered throughout the semester. Between my office hours, your weekly discussion section, and your TAs office hours you have access to nearly 4 hours of student-led learning time outside of class each week. We provide such extensive access to you for this course because it is often the case that students need quite a bit of assistance mastering this material.

It will be a HUGE help to you throughout your college experience if you take a proactive approach to your learning and capitalize on the learning resources offered to you. It is also important to maintain healthy boundaries with our time. Consequently, we require that you ask about substantive questions in class, office hours or discussion section and NOT over email.



**Self-Identification & Inclusive Learning Environments**

The University of Maryland has expressed a recognition of the importance of a diverse student body and has articulated a commitment to fostering equitable classroom environments.

In service of that goal, I want to recognize that we bring multi-dimensional identities to the classroom with us. These identities shape how we engage with the substantive course material and our interaction with one another. My office hours provide space for any conversations you may wish to have with me about your experiences engaging with the course material. I am always open for feedback on how I can better foster an inclusive learning environment.

Importantly, how you identify in terms of your gender, race, class, sexuality, religion, and dis/ability, among all aspects of your identity, is your choice whether to disclose (e.g. should it come up in classroom conversation about our experiences and perspectives) and should be self-identified, not presumed or imposed.

I invite you, if you wish, to tell us how you want to be referred to both in terms of your name and your pronouns (ze, they/them, she/her, he/him etc.). The pronouns someone indicates are not necessarily indicative of their gender identity. Visit [trans.umd.edu](https://trans.umd.edu) to learn more. I will do my best to address and refer to all students accordingly and will support you in doing so as well.

**Feedback:** I am *always* open to suggestions about how I can improve my teaching, so I encourage all constructive feedback. While I cannot guarantee that I will implement your suggestions, I can tell you that I will always provide a rationale for accepting or declining suggestions. In addition to providing feedback to me directly, I also encourage you to fill out the online evaluation at the end of the semester. CourseEvalUM will be open for students to complete their evaluations for Spring 2022 courses towards the end of the semester. Students can go directly to the website ([www.courseevalum.umd.edu](https://www.courseevalum.umd.edu)) to complete their evaluations. Students who complete evaluations for all their courses in the previous semester (excluding summer), can access the posted results via Testudo's CourseEvalUM Reporting link for any course on campus that has at least a 70% response rate.

**Copyright:** From the UMD Office of Undergraduate Studies: "Class lectures and other course materials are copyrighted and may not be reproduced for anything other than your personal use without the permission of the course instructor. Course materials are the property of the course instructor – do not sell them, do not post them on a website." Persons who sell or distribute copies or modified copies of my course materials, possess commercial copies of my notes (i.e. Terpnotes), or assist another person or entity in selling or distributing those materials may be considered in violation of the University Code of Student Conduct, Part 9(k).

Please see the Office of Undergraduate Studies page at [www.ugst.umd.edu/courserelatedpolicies.html](https://www.ugst.umd.edu/courserelatedpolicies.html) for further information on Course Policies at the undergraduate level.



## Course Calendar &amp; Assignment Due Dates:

Week	Date	Topic	Reminders/Assignments
1	1/25	Introduction to Class & What is Statistics?	
	1/27	Data Structures: Variables	
2	2/1	<b>No Class!</b>	
	9/10	Data Structures: Empirical Distributions	
3	2/8	Measures of Location	
	2/10	Measures of Dispersion	<b>Problem Set 1 Due in Class @ 9:30am</b>
4	2/15	Exam I Review	
	2/17	<b>Midterm I</b>	
5	2/22	Probability I	
	2/24	Probability II	
6	3/1	Theoretical Distributions	
	3/3	Central Limit Theorem	
7	3/8	Confidence Intervals I	
	3/10	Confidence Intervals II	<b>Problem Set 2 Due in Class @ 9:30am</b>
8	3/15	Exam II Review	
	3/17	<b>Midterm II</b>	
9	3/20- 3/27	<b>No Class - Spring Break!</b>	

<b>Week</b>	<b>Date</b>	<b>Topic</b>	<b>Reminders/Assignments</b>
10	3/29	Hypothesis Testing: Introduction	
	3/31	Hypothesis Testing: One Sample z-tests	
11	4/5	Hypothesis Testing: One Sample t-test	
	4/7	Hypothesis Testing: Independent Sample t-test	
12	4/12	Hypothesis Testing: Paired Sample t-test	
	4/14	Hypothesis Testing: ANOVA I	
13	4/19	Hypothesis Testing: ANOVA II	
	4/21	Exam III Review	<b>Problem Set 3 Due in Class @ 9:30am</b>
14	4/26	<b>Midterm III</b>	
	4/28	Covariance + Correlation	
15	5/3	Linear Regression I	
	5/5	Linear Regression II	
16	5/10	Linear Regression III <b>Last Day of Class!</b>	<b>Problem Set 4 Due in Class @ 9:30am</b>
	5/13		<b>Final Empirical Paper due on ELMS by 11:59pm</b>

**NOTE:** This syllabus provides a general plan for the course; deviations may be necessary.