

Second-Year Seminar: Citizenship in Practice

Statistics for Engagement Patterns STA 200 August 25 – September 17, 2025 West 200

Course Instructor: Tyler George

Email: tgeorge@cornellcollege.edu

Phone: Please email

Office Location & Hours: West 311, M/Tu/Wed/Th 3-4 pm & Appointment (Signup HERE)

I generally respond to emails very quickly. This is the best way to contact me.

Course Website: https://stats-tgeorge.github.io/STA200 S4E/

Course Google Calendar:

https://calendar.google.com/calendar/u/0?cid=Y184ODgyYzdjMGY4OWQ5ZjczYjE1MDg3ODdhYTVlZTk0ODc4NWEwM2Y5ODg0NGRlNzg1MDgwMzgxNDA2MDViYmQ3QGdyb3VwLmNhbGVuZGFyLmdvb2dsZS5jb20

Course Moodle: https://moodle.cornellcollege.edu/course/view.php?id=8899

You are A Priority

My goal for this block is to help you learn the material. I want to first and foremost recognize that you are an individual and thus are unique and may learn uniquely. Additionally, your health and well-being are priority one. Learning cannot happen effectively if you don't meet your other personal needs. That all being said, I have structured the class in a way that, based on my experience teaching and learning, I believe will be most beneficial for most students. I promise to do my best to create an inclusive and engaging learning environment. I ask that you keep an open line of communication between us for when you need help and/or flexibility. You and your learning are why I am here.

Course Description (Note: Course goals have changed since writing)

This course will examine factors impacting Iowans' engagement with Waypoints services. The course will include (1) learning the descriptive statistics needed to investigate data, (2) communicating with Waypoint representatives to establish straightforward research questions, learning what data need to be collected and how to access various databases, (3) completing the analysis of their data, and (4) presenting your findings. We may go off-campus to present our findings to Waypoint and participate in other relevant activities. Everybody must sign a confidentiality agreement to participate in this course, as we will be working with private data.

Learning Outcomes and Course Goals

- 1. We will acquire knowledge of homelessness and inequities in the use of housing services facing the communities of Iowa and the United States. (Knowledge, Citizenship)
- 2. We will understand the context of *the issues or questions that include Iowa and the United States* (Knowledge)
- 3. We will use creative and critical thinking skills to identify, propose, and evaluate strategies for addressing inequities in homelessness. (Inquiry, Reasoning)
- 4. We will develop skills for collaboration with and within diverse groups of individuals, including the cognitive skill of perspective-taking. (Communication, Intercultural literacy, Citizenship)
- 5. We will develop research and information literacy skills. (Inquiry, Reasoning)
- 6. We will demonstrate communication skills through the oral presentation of our findings. (Communication)
- 7. Communicate effectively with community partners/stakeholders through active listening, culturally responsive questioning, and conversations throughout the analysis process. (Communication)
- 8. Apply data science and statistical skills to community-identified challenges by collecting, analyzing, and/or visualizing data in ways that directly address local priorities. (Knowledge, Citizenship)
- 9. Critically examine the implications of working with data from a community, including identifying ethical concerns such as power dynamics, representation issues, sources of bias, and model explainability; analyzing the possible impacts of these concerns on community members; and suggesting appropriate courses of action to address them. (Ethical behavior, Reasoning)

Required Texts, Materials, or Equipment

- Open source texts *OpenIntro Statistics* and *Introduction to Modern Statistics*, both available at https://www.openintro.org/book/stat/.
- Variety of materials including videos, podcasts, articles, and speakers. This list will grow on our course website as the block progresses and will be free to read and view.
- Please bring your charged laptop to class every day. Software will be available online and will only require an internet browser.

Software – Minitab and Excel

You will use the Minitab statistical software. You do <u>not</u> need to pay for Minitab. You will be given temporary paid access to Minitab, and you will be able to log into it with your Cornell email and password. Go to https://app.minitab.com to check it out. Your login may not be active until the first day of class.

You can install Excel for free by following the instructions at <u>THIS LINK</u>. Scroll down to "MS Office for personal use."

Daily Work/Homework/Activities

- This course includes working with community partner Waypoint. Waypoint coordinates housing services in Iowa, including homeless shelters. You will spend time in class and outside of class on group projects to answer their research questions.
- Waypoint will be providing two Zoom trainings. See the calendar below.
- Typically, you will be assigned a resource to engage with for homework outside of class. You will use in-class time to discuss that resource in groups and then as a whole class.
- There will be a few structured activities for you to learn and practice statistical methods.
- You and your group will also give both mid-block presentations and final block presentations to Waypoint for the group's findings. This will be the same project that is presented for the showcase, detailed below. We will travel to Cedar Rapids, IA, to give final presentations.

Major Assignments/Activities/Exams: Descriptions & Deadlines

I. Required for our SYS Class

Community Partner Group Project – We will work on large group project with our community partner Waypoint. You will be given a separate project document in week 1.

II. Required of all SYS students:

Showcase presentation - Tuesday, September 16th (group time slots TBD) We will discuss in class the many forms your final group project presentation might take. I plan to provide open options, which will be discussed in class and followed by detailed instructions. (Learning Outcome (6))

The Showcase is an opportunity for you and your peers to demonstrate your new understandings, the skills you've developed, and solutions to problems you've investigated. Plan on a five to ten-minute presentation and be prepared to answer questions that follow. An assessment of your oral communication skills may be part of this experience. More instructions about how the Showcase will be organized will be shared later.

Class Participation

For most of the class you will work in groups (learning outcome (4)). You will practice difficult conversations and communicating statistical analysis with the class and group members. The groups will be pseudo-random (I will be making some intentional choices based on some students' history with statistics). I intend the groups to stay the same, but that could change based on how well they work.

When we work in groups in class, we will decide on roles (ex, writer, recorder, statistical software user) and keep track of those roles. Group members will rotate roles between tasks to ensure that everybody shares the workload, feels included, and has equitable opportunities to learn. We will also have classroom norms and group contracts.

Your daily participation in the course discussion is expected. I will track each student's interaction with their group members during each class session and plan to provide you with a weekly progress grade. See grade breakdown below.

Grade Breakdown (Gradebook in Moodle)

Homework (200pts)

There will be some assignments during the block. They will include problems such as practicing a statistical method or completing a reflection/essay on assigned material.

Discussion Participation (100pts)

I will track each class session and give a grade based on the proportion of sessions you participate. You cannot make these points up if you miss class, but you can miss up to two without a reduction in your final score.

Activities and In-Class Reflections (50pts)

We will have a few activities during the block to practice statistical methods, and/or explore data with similar variables like we are studying. After some examples in class or after a class discussion, I may ask you to do an in-class reflection. This category is primarily credit/no credit.

Statistics Exam (100pts)

You will have a statistics content exam on the second Tuesday of the block.

Project (450pts)

Much of our class will be in your groups, working on a major project to answer the clients' questions of interest.

There will be at least 3 stages of submission, and at least 3 presentations that will add up to this score. A final report will be submitted at the end. More information on our website.

Total Points: 1000

Course Support and Resources

See the course resource page on my site: https://stats-tgeorge.github.io/personal website/course-support.html.

Course Policies and Information for Students

- 1. Attendance Policy: You are expected to attend class every day. Missing class will negatively affect your participation score, and you're in-class activities and reflection score. In some cases, activities can be made up. In most cases, there will be no way to make up lost points. You have only 4 few "grace" class sessions (not whole days) that won't count against you.
- 2. **Course Discussions:** Our course discussion will be based on your submissions the night before. I will accept late work for extenuating circumstances. Turing in late work will negatively affect your learning in the course. I am flexible and understanding, but also want you to get the most out of this course. Please reach out and communicate as early and as often as possible.
- 3. **Feedback and Revisions**: Your group projects will involve multiple steps and timelines for peer review and revisions. Other components of the course may or may not have revisions.

Tentative Grade Scale

93-100	Α
90-92	A-
87-89	B+
83-86	В
80-82	B-
77-79	C+
73-76	С
70-72	C-
67-69	D+
63-66	D
60-62	D-

- 4. **Technology:** Please make sure to bring your charged laptops to class. You may not always need them on and open, but you should be prepared to do so. We will often work with Excel and Minitab software.
- 5. **Disabilities and Accommodations:** Cornell College makes reasonable accommodations for persons with disabilities. Students should notify the Office of Academic Support and Advising and their course instructor of any disability related accommodations within the first three days of the term for which the accommodations are required, due to the fast pace of the block format. For more information on the documentation required to establish the need for accommodations and the process of requesting the accommodations, see http://www.cornellcollege.edu/academic-support-and-advising/disabilities/index.shtml.
- 6. **Academic Honesty:** Cornell College expects all members of the Cornell community to act with academic integrity. An important aspect of academic integrity is respecting the work of others. A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known. When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source. If there is no appropriate acknowledgment of sources, whether intended or not, this may constitute a violation of the College's requirement for honesty in academic work and may be treated as a case of academic dishonesty. The procedures regarding how the College deals with cases of academic dishonesty appear in The Catalogue, under the heading "Academic Honesty."
 - Always cite your sources when you present ideas and/or language that you have not developed yourself, including material from class lectures and discussions.
 - Violation of this policy includes collaborating on assignments where collaboration is not allowed and/or utilizing notes, texts, etc. on any assignment where use of such materials is not allowed.
- 7. AI Policy: I expect you to generate your own work in this class. When you submit any kind of work (including projects, exams, quizzes, or discussions), you are asserting that you have generated and written the text unless you indicate otherwise by the use of quotation marks and proper attribution for the source. Submitting content as your own that has been generated by someone other than you, or was created or assisted by a computer application or tool, including artificial intelligence (AI) tools such as ChatGPT is cheating and constitutes a violation of our Academic Honesty policy. You may use simple word processing tools to update spelling and grammar in your assignments, but unless given permission otherwise, you may not use AI tools to draft your work, even if you edit, revise, or paraphrase it. There may be opportunities for you to use AI tools in this class. Where they exist, I will clearly specify when and in what capacity it is permissible for you to use these tools. Your projects will be written in Google Docs, which I will use to track your progress over time. Any copying and pasting of sections will be noticeable.

8. **Mandatory reporter statement:** It is our goal that you feel supported and able to share information related to your life experiences during classroom discussions, in your written work, and in any one-on-one meetings with your professor. You should also know that all Cornell College faculty and staff are mandatory reporters. This means that we will keep information you share with us private to the greatest extent possible. However, we are required to share information regarding sexual assault, abuse, criminal behavior, or about a student who may be a danger to themselves or to others with Cornell College's Director of Equity and Compliance. Suppose you wish to speak to someone confidentially who is not a mandatory reporter. In that case, you can schedule an appointment with one of the counselors in the Ebersole Health and Wellbeing Center or contact the College Chaplain, Rev. Melea White, at mwhite@cornellcollege.edu.

Tentative Course Event Schedule					
Monday	Tuesday	Wednesday	Thursday	Friday	
8/25/2025	8/26/2025	8/27/2025	8/28/2025	8/29/2025	
Waypoint Introduction and Training					
9/1/2025	9/2/2025	9/3/2025	9/4/2025	9/5/2025	
		Descriptive Statistics Exam		Midblock Presentation with Waypoint 9am	
9/8/2025	9/9/2025	9/10/2025	9/11/2025	9/12/2025	
9/15/2025	9/16/2025	9/17/2025			
	SYS Campus Showcase (10:30- 3 overall)	Present to Waypoint in CR (12:30-3pm)			