University of Wisconsin-Madison

INSTRUCTOR
Dr. Chelsea Andrews

PSY 210: BASIC STATISTICS FOR PSYCHOLOGY

Summer 2024

IMPORTANT

THIS COURSE IS COMPLETELY ONLINE!

You MUST have access to high-speed Internet EVERY DAY of the ENTIRE COURSE

Not having access to high-speed Internet will NOT be a valid excuse for not completing your work. You must have access to the Internet EVERY DAY during the ENTIRE TERM!

What will I learn?

At the end of this course, you should be able to…

- ***Explain why data beat anecdotes.***
- ***Understand why association is not causation.***
- ***Explain the fundamental concepts and apply the basic procedures that underlie descriptive and inferential statistics.***
- ***Interpret and draw conclusions from graphical displays and standard output from statistical software packages.***
- ***Understand why statistical significance does not necessarily imply practical importance.***
- ***Demonstrate an awareness of ethical issues associated with sound statistical practice.***

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HOW CAN I SUCCEED IN THIS COURSE?

You can learn something new every day!

First, work on the course every day. The best way to acquire any skill – be it playing acoustic guitar or speaking Portuguese – is to practice every day. Similarly, the best way to do well in this course is to practice (i.e., work on the course) every day.

If you've taken other online courses, you might be surprised by how this course works. In other online courses, you might have been able to hang back and then cram in a lot of work at the end of the term. A hang-back strategy will NOT work in this course.

Therefore, **the second way to do well in this course is to keep up**. You'll always have at least two weeks to complete each assignment, including a one-week reasonable extension after each assignment is due to complete the assignment late or to correct any errors you made in your initial assignment.

But after two weeks of lead time including a one-week reasonable extension, you'll no longer be able to complete the assignment. The opportunity will be gone, just like in life.

Accordingly, **the third way to do well in this course is to work ahead**. Your working ahead is the absolute best way to protect yourself against any unexpected mishap, and we all know that mishaps happen.

What books do I need to buy?

NONE! (zero)

ALL course materials are available on the open-access website: https://online210.psych.wisc.edu

What exams do I have to take?

NONE! (zero)

There will be NO quizzes, NO tests, and NO final exam. Instead, your grade will be based on your completing 70 (seventy) Assignments.

HOW WILL I LEARN IN THIS COURSE?

The pedagogy of this course is driven by empirically proven principles of learning, including the principles of active learning, which is more beneficial than passive learning, and frequent incremental practice, which is more beneficial than sporadic practice (Gernsbacher, 2015).

Therefore, in this course, you will acquire skills every day by completing 70 incremental assignments across the term. You will be expected to engage with the course, and with your peers, **daily** (via online discussion, including synchronously text-based chat).

How much TIME do I need to spend on this course?

PSY 210 "Basic Statistics for Psychology" is a 3-credit Quantitative Reasoning B course

Level: Intermediate

L&S Credit: Liberal Arts and Science (Type C)

Requisites: Satisfied Quantitative Reasoning (QR) A requirement; PSYCH 201 or 202 or 281 or concurrent enrollment

Because Psychology 210 is a **3-credit course**, you're expected to spend **a total of 135 hours on the course** (3 course credits x 45 work hours per credit = 135 total work hours for the entire course).

If you are taking this course during the SUMMER term:
You are expected to work on this course **4 HOURS per DAY for 4 days of the week** and **2 HOURS per DAY for 2 of the other 3 days of the week.**

You should **NOT** register for this course if you will not be able to work 4 hours per day for 4 days of the week and 2 hours per day for 2 of the other 3 days of the week on ONLY this course, during all

HOW WILL I EARN MY GRADES?

On each of the course's **70** assignments, you can earn the following final score:

3 points: If your initially submitted assignment was submitted BEFORE one week after the assignment's due date AND your initially submitted assignment **fulfilled ALL** the assignment's requirements.

2 points: If your initially submitted assignment was submitted BEFORE one week after the assignment's due date AND your initially submitted assignment fulfilled **MOST** BUT NOT ALL the assignment's requirements AND you **CORRECTED** your initially submitted assignment to fulfill ALL the assignment's requirements ANYTIME before one week after the due date.

1 point: If your initially submitted assignment was submitted BEFORE one week after the assignment's due date AND your initially submitted assignment fulfilled **MOST** BUT NOT ALL of the assignment's requirements AND you **DID NOT CORRECT** your assignment to fulfill ALL the requirements ANYTIME before one week after the due date.

0 points: If your assignment **was NOT submitted** ANYTIME before one week after the assignment's due date OR if your assignment did **NOT fulfill MOST or ALL** of the assignment's requirements ANYTIME before one week after the assignment's due date.

Your final course grade will be the percentage of points you earn (**of the maximum possible 210 points**), using this scale:

A ... 93.00 - 100%	C ... 70.00 - 77.99%
AB ... 88.00 - 92.99%	D ... 60.00 - 69.99%
B ... 83.00 - 87.99%	F ... Less than 60%
BC ... 78.00 - 82.99%	

WHAT WILL I LEARN IN EACH UNIT?

Course Opens: June 3 ** Begin Working Ahead on June 3 **

Unit 1: June 17 - June 19 * *Welcome to Statistical Thinking* *

Unit 2: June 20 - June 23 * *Working with Data* *

June 23: Last day to drop this course or withdraw from all courses without getting a grade of DR or W

Unit 3: June 24 - June 26 * *Summarizing Data* *

Unit 4: June 27 - June 30 * *Visualizing Data* *

June 30: Last day to request instructional accommodations (for existing disabilities) and religious observance accommodations

Unit 5: July 1 - July 3 * *Modeling Data* *

July 4: U.S. Independence Day observed - no assignments due

Unit 6: July 5 - July 7 * *Understanding Probability & Chance* *

Unit 7: July 8 - July 10 * *Sampling Populations* *

Unit 8: July 11 - July 14 * *Testing Null Hypotheses* *

Unit 9: July 15 - July 17 * *Quantifying Statistical Effects* *

Unit 10: July 18 - July 21 * *Appreciating Bayesian Statistics* *

Unit 11: July 22 - July 24 * *Categorical & Continuous Relationships* *

Unit 12: July 25 - July 28 * *General Linear Modeling* *

Unit 13: July 29 - July 31 * *Reproducing Research* *

Unit 14: August 1 - August 4 * *Continuing to Use Statistical Thinking* *

WHEN ARE MY ASSIGNMENTS DUE?

Every Monday
Assignment #1
Assignment #2

Every Tuesday
Assignment #3
Assignment #4

Every Wednesday
Assignment #5

Every Thursday
Assignment #1
Assignment #2

Every Friday
Assignment #3
Assignment #4

Every Saturday
NO Assignment due but try to work ahead!

Every Sunday
Assignment #5

NOTE: For Summer 2024, because THU JUL 4 is a University holiday, the due dates for Unit 6 are shifted forward.

How should I respond to other students' discussion board posts?

Each response you write to another student **MUST be at least 200 words long** and must include **AT LEAST TWO** (or more) of the following:

A COMPLIMENT: I like how … OR I like that …

A COMMENT: I agree that … because … OR I disagree that … because …

A CONNECTION: I have also read that … OR I have also seen that … OR I have also heard that … OR I have also thought that …

A QUESTION: I wonder why … OR I wonder how … OR I wonder who … OR I wonder what … OR I wonder when … OR I wonder where …

HOW CAN I TAKE ADVANTAGE OF THE FLEXIBILITY ACCOMMODATION THAT IS BUILT INTO THIS COURSE?

This course is based on the principles of Universal Design, which prescribes that **instructional accommodations should be** built into the environment and **available to all students** (just like elevators and curb cuts) rather than needing to be requested ex post facto or available to only some students.

Therefore, in this course, all lecture videos are accompanied by written transcripts and captions; all PDFs are screen-readable (and voice-able with text-to-speech software, as well as searchable and highlightable). There are no timed tests, no in-person or synchronous lectures or labs, and no in-person attendance requirements.

The course offers nearly a hundred grading opportunities, rather than only three or four, and the course is highly structured with explicit due dates. These accommodations are all built into this course to facilitate all students' success.

Importantly, the course has a built in flexibility accommodation available to all students. All students have the opportunity to work ahead; to use a reasonable one-week extension on all assignments; and to miss occasional assignments and still earn a good grade.

Flexibility is built into this course to aid all students, including students with disabilities, as well as students with chronic health conditions, religious conflicts, care-giving responsibilities, unpredictable work schedules, and student athletes -- everyone.

To take advantage of the flexibility accommodation, you must do three things.

First, take advantage of the opportunity to work ahead. The entire course is available before the course formally starts; most Discussion Boards open two weeks before they're due.

Complete as many assignments in advance as you can. If, for example, you're a student with a chronic health condition, the work you do in advance when you're feeling well will be like money in the bank for the times later in the term when you might not be feeling well.

Second, take advantage of the opportunity to turn in work up to one week late. Every student can turn in any assignment up to one week late without penalty. **It is unnecessary to ask for an extension on any assignment's due date because all students have a one-week reasonable extension on every assignment's due date.**

However, it's important that you NOT treat the end of the one-week reasonable extension as a due date. It's not a due date. Each assignment's due date is its due date; the one-week reasonable extension is the extension, and for pedagogical and practical reasons it's the only possible extension.

Third, take advantage of the opportunity to miss an assignment if needed. Experiment with Canvas's "What If" grades, and you'll see that all students can miss an assignments here or there and still earn a good final grade.

Flexibility is built into this course for all students because we know how important it is for everyone to have a built-in flexibility accommodation. Take advantage of it!

HOW DO I RECEIVE REASONABLE INSTRUCTIONAL ACCOMMODATIONS FOR DISABILITIES?

UW-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility.

Students are expected to inform the instructor of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. The instructor will work either directly with the student or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations, as part of a student's educational record is confidential and protected under FERPA.

From your Instructor

I am genuinely interested in each student succeeding in this course.
If you encounter any barriers to your success, please let me know.
I'm always available by email at
Andrews7@wisc.edu

WHERE DO I TAKE CONCERNS ABOUT A TEACHING ASSISTANT OR COURSE INSTRUCTOR?

Occasionally, a student may have a concern about a TA or course instructor. If that happens, you should feel free to discuss the matter directly with the TA or instructor. If the concern is about the TA and you do not feel comfortable discussing it with them, you should discuss it with the course instructor.

Concerns about mistakes in grading should be resolved with the instructor in the great majority of cases. If the concern is about the instructor (other than ordinary grading questions), and you don't feel comfortable discussing it with them, make an appointment to speak to the Associate Chair for Undergraduate Studies, Professor Anthony Auger.

If you have a concern about sexual harassment, you may also take your concern to Dr. Linnea Burk, Clinical Associate Professor and Director, Psychology Research and Training Clinic, Room 315 Psychology (262-9079; burk@wisc.edu).

If you have concerns about climate or bias in this class, or if you wish to report an incident of bias or hate that has occurred in class, you may contact the Chair of the Department, Professor Allyson Bennett (allyson.j.bennett@wisc.edu) or the Chair of the Psychology Department Climate Committee, Professor Martha Alibali (martha.alibali@wisc.edu). You may also use the University's bias incident reporting system, which you can reach at this link.

AM I ALLOWED TO SELL OR SHARE MATERIALS FROM THIS COURSE TO COMMERCIAL SITES SUCH AS COURSE HERO, CHEGG, SLADER, OR SIMILAR WEBSITES?

All materials in this course are governed by a Creative Commons Attribution-NonCommercial 4.0 International License.

Because of the course's Non-Commercial License, materials from this course CANNOT be shared with commercial entities such as Course Hero, Chegg, Slader, or similar commercial websites.

In addition, as noted above, academic integrity means not enabling other students to commit academic misconduct, as well as ensuring the integrity of your own work.

WHAT SHOULD I DO IF I AM IMPACTED BY COVID-19?

Students should continually monitor themselves for COVID-19 symptoms and get tested for the virus if they have symptoms or have been in close contact with someone with COVID-19.

Because we believe it is unnecessary for students to be required to share their trauma with their instructors or TAs, if you are impacted by COVID-19 due to isolation, quarantine, or other factors, there is no need to contact Dr. Andrews or the TAs.

Instead, take advantage of the course's built-in Flexibility Accommodation, including working ahead, which is your best safety net for COVID-19 related problems and other unpredictable events in your life!

How does UW-Madison support Inclusive Excellence?

UW-Madison's goals are to advance success for all students; connect every student with the best support for them; ensure pathways to belonging for all students; strategically organize campus-level student support; engage in continuous assessment and improvement; and responsibly steward university resources.

UW-Madison values the contributions of each person and respects the profound ways their background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, and outreach..

WHAT ARE THE ETHICS OF BEING A PSYCHOLOGY STUDENT ?

The faculty of the Department of Psychology at UW-Madison uphold the highest ethical standards of teaching and research. They expect their students to uphold the same standards of ethical conduct. By registering for this course, you are implicitly agreeing to conduct yourself with the utmost integrity throughout the course.

In the Department of Psychology, acts of academic misconduct are taken very seriously. Such acts diminish the educational experience for all involved – students who commit the acts, classmates who would never consider engaging in such behaviors, and instructors.

Academic misconduct includes, but is not limited to, cheating on assignments, sabotaging the work of classmates, submitting fraudulent data, plagiarizing the work of classmates or published sources, acquiring previously written papers and submitting them (altered or unaltered) for course assignments, collaborating with classmates when such collaboration is not authorized, and assisting fellow students in acts of misconduct. Students who have knowledge that classmates have engaged in academic misconduct should report this to the instructor. For detailed information on how to avoid plagiarism, see this link.

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university.

Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary actions, including failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to the UW-Madison Office of Student Conduct and Community Standards.

What should I do if a religious observance conflicts with an assignment due date?

According to University policy on religious observances, students should be allowed to complete assignments before they are due, if the assignments' due dates conflict with a religious observance. Therefore, as recommended throughout this course, take advantage of the opportunity to work ahead!

What can I expect from my Instructor?

Dr. Andrews will abide by the "Seven Principles of Good Practice in Undergraduate Education."

- She will educate using the methods of active learning.
- She will emphasize your spending time on task.
- She will provide rapid feedback to you.
- She will encourage you to cooperate and reciprocate with other students.
- She will communicate high expectations.
- She will respond to your email within 24 hours.
- She will respect your individual talents.

WHO SHOULD I CONTACT IF I HAVE A QUESTION?

Whenever you have a question, you should **email Dr. Andrews** (Andrews7@wisc.edu).

For your email subject heading, use **PSY 210: Question**

Send your email message from your wisc.edu email address.

Please do NOT directly email the TAs although you can communicate with them through Canvas Gradebook Comments.

HOW DOES THIS COURSE MEET THE UNIVERSITY'S QUANTITATIVE B (QUANT B) COURSE REQUIREMENTS?

Psychology 210 fulfills UW-Madison's requirements for a Quantitative Reasoning Part B course. The course material "challenges students to think critically and apply quantitative skills to develop models, interpret data, draw conclusions, and solve problems within a disciplinary or interdisciplinary context."

By learning measures of central tendency, variability, probability, sampling distributions, hypothesis testing, confidence intervals, t-tests, Chi-square, regression and correlation, and by being introduced to analysis of variance (all of which make up this Course's Content), you will fulfill the requirements of a Quantitative Reasoning Part B Course and earn Quant B course credit!