Psychology 295 – Data Analysis in Psychological Research – Spring 2022

10:20-11:40 ET Tuesday & Thursday, 118 Psychology Bldg.

Classes will begin on Zoom

**The class zoom link will always be:**

[**https://msu.zoom.us/j/99146317626**](https://msu.zoom.us/j/99146317626)

**Passcode: kashy295**

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| **Instructor:**  **Office:**  **email:** | Dr. Debby Kashy  249B Psychology Bldg  [kashyd@msu.edu](mailto:kashyd@msu.edu) | **Office Hours:** | Wed. 1:30-2:30 ET via Zoom at: <https://msu.zoom.us/j/5634009666>  Passcode: PSY295 |
|  |  | | ***And by appointment scheduled by email*** |

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| **Graduate TA:**  **email:** | Katie Leahy  [leahyka1@msu.edu](mailto:leahyka1@msu.edu) | **Office Hours:** | Tue. 1:00-2:00 ET via Zoom at: <https://msu.zoom.us/j/92319955573>  Passcode: stats  ***And by appointment scheduled by email*** |
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| **Undergrad Asst:** | Jennifer Warkentien | **Appointments:** | Scheduled by email |
| **email:** | [warkent7@msu.edu](mailto:warkent7@msu.edu) |  | |
|  |  |  |  |
| **Undergrad Asst:** | Lauren Wright | **Appointments:** | Scheduled by email |
| **email:** | [wrigh755@msu.edu](mailto:wrigh755@msu.edu) |  | |

**Course Goals:**

This class is designed to introduce you to data analysis for the behavioral sciences. We will discuss both descriptive and inferential statistical analyses. Descriptive statistics include frequencies, measures of central tendency, and measures of variability, among others. Inferential statistics allow us to conduct research on samples (e.g., 200 students from PSY 101) but then assess whether our results can be generalized to a larger population. Examples of inferential statistics include z-tests, t-tests, and F-tests or ANOVA. We will also discuss ways of measuring association between variables using correlation and regression. The overriding goal of the class is for you to be able to understand these types of statistical methods at both an operational level (i.e., how they’re done) and at a theoretical level (i.e., why and when they’re done and what they mean).

**Required Text:**

An Introduction to Psychological Statistics (2018) by Garett C. Foster, David Lane, David Scott, Mikki Hebl, Rudy Guerra, Dan Osherson, & Heidi Zimmer. Publisher: University of Missouri - St. Louis; Open Textbook Library.

<https://open.umn.edu/opentextbooks/textbooks/709>

Take note, the above textbook is not available for purchase in the bookstore because it is an **open-source, non-profit**, and most importantly, **free textbook**. A free pdf of the textbook can be downloaded or browsed in from the above website. This textbook should be an invaluable asset in helping you understand the concepts of the class. This class contains many complex ideas and concepts, and while I will lecture about these topics it is very helpful for you to be able to read about those same topics from a different source.

**Required Software:**

Because virtually all statistical analyses are now conducted using computer software, we will be supplementing our use of hand-calculations with data analyses using the freely available JASP program, which can be downloaded for free from <https://jasp-stats.org/>

**Time Zone:** All times in the syllabus and in the course are considered as those in the Eastern Time Zone.

**Graded components of the class will include:**

Homework, 3 midterm exams, 3 opportunities to do corrections on the Midterm exams, and a final exam. Each of these is discussed in detail below.

**Homework:**

There will be approximately 10 homework assignments over the course of the semester. Homework will announced in class and will generally be due 7 days after it is assigned. Homework assignments will include both hand calculations and analyses using the JASP program.

The **LON-CAPA** system will be used to generate and grade homework. The LON-CAPA system generates unique assignments for every student in the class – so although the basic framework for the problems will be similar for every student, the actual numbers and sometimes the specific questions asked will differ from person to person. One of the nicest aspects of LON-CAPA is that you can get **immediate feedback** about whether or not your solutions to the problems are correct via the Internet, and you have opportunities to redo your calculations/answers and still receive full credit. Homework assignments and due-dates will be announced in class.

You can access your assignments by going to the LON-CAPA website ([**http://loncapa.msu.edu**](http://loncapa.msu.edu)and logging on using your MSU id information.

You can log-in to the LON-CAPA web site and print out a copy of your assignment. After working on the problems you can then enter your answers at the LON-CAPA web site, and if they are right, you get credit. If they are wrong, you can try again. Generally each *computational problem* will allow you up to 10 tries to get it right and each *conceptual question* will allow you up to 5 tries to get it right. Thus, it is quite possible for every one of you to get close to 100% on the homework assignments during the semester – if you are willing to do some work & persevere.

**Getting Help:**

***One-on-one help sessions as well as group help sessions will be scheduled throughout the semester using Zoom.***

The graduate TA (Katie), the two undergraduate assistants (Jennifer & Lauren), and I are here to help you master the course material. The graduate TA and I will hold regular office hours as well as schedule appointments via email. The Undergraduate Assistants will schedule appointments via email and will also schedule help sessions during the semester via zoom. ***Please contact us via email and you can expect to have a reply from me within 24 hours. If you have not heard back in that time-frame, please email again.***

**Midterm Exams:**

The three Midterm exams will not be cumulative. Although they will be administered using a Scantron format (so they will be in a multiple choice form) some of the questions will be computational. In essence, they will be a combination of the types of questions given on the homework. (Exams are more heavily weighted towards conceptual questions and Homework is where we cover most computational questions.)

The Midterm exam schedule will be: Midterm #1: Thursday, February 10 at 10:20 ET

Midterm #2: Tuesday, March 29 at 10:20 ET

Midterm #3: Tuesday, April 26 at 10:20 ET

***At this point (i.e., January 2, 2022) I do not know whether these exams will be administered in-person or on-line. This is something that will be determined as the semester progresses and I will let everyone know as soon as possible.***

**Corrections on the Midterm Exams:**

Because I recognize that multiple choice format does not allow for partial credit on exams, you will have an opportunity to improve your midterm exam grades using LON-CAPA. At the end of each of the three midterm exams, you will be allowed to log onto LON-CAPA to do corrections/extra credit on a second version of the exam. This second copy will be similar to your original exam except that it will have new numbers and somewhat different versions of conceptual questions. You will then have 72 hours to redo the problems and enter your answers in LON-CAPA (So with a Thursday exam at 10:20 ET, the corrections will be due at 10:21 a.m. on Sunday ET.) Accessing LON-CAPA for the midterm corrections will be the same procedure as the homework

In order for you to make any improvement in your grade, you will need to redo all or most of the problems on the exam (That is, you cannot just redo problems you got wrong on the original exam). Your new grade on the exam will be calculated as follows:

If your Corrected score is higher than your original score:

**New Exam grade = Original Exam grade + .20\*(Corrected score – Original score)**

If your Corrected score is less than or equal to your original score:

**New Exam grade = Original Exam grade**

So if you get a 70 on the midterm, but make the corrections and get 100 on the corrected version, your new grade on the midterm will be 70 + .20\*(100 – 70) = 76.

**Final Exam:**

The Final exam will be cumulative (that is, it will cover the entire semester's material). It will focus on conceptual material rather than computational material and so no computations will be required for the final. Corrections will not be possible on the Final exam. **The final exam is scheduled for Friday, May 6, 7:45-9:45 ET.**

**Makeup exams:**

If an exam is going to be missed, you should notify me in advance. In such cases, an alternative exam form will be prepared. Note that make-up exams will consist of mostly short-answer questions and will not be LON-CAPA exams. ***Corrections will not be allowed for make-up exams because they will be hand graded.***

**Grades:** Grades will be determined as follows: Homework: 15%

3 Midterm exams: 20% each

Final exam: 25%

**The grading scale** will be no more stringent than the following: > 89.500 = 4.0

84.500 - 89.499 = 3.5

79.500 - 84.499 = 3.0

74.500 - 79.499 = 2.5

69.500 - 74.499 = 2.0

64.500 - 69.499 = 1.5

59.500 - 64.499 = 1.0

< 59.500 = 0.0

**Policy on grade changes:** At the end of the semester, if you believe that I made an error in calculating your grade, please let me know. I will check into the matter, and I will change your grade if I have made an error. This is the **only** circumstance under which I will change a grade. Under no circumstance will I “bump up” your grade, or give you a special assignment. I never do this, and so please don’t ask. **There will be no exceptions.**

**Attendance:**

I think that attending class is an important part of learning, and it has been my experience that students have a difficult time studying on their own without attending class. So I do consider attendance mandatory**. *How this translates to the online environment I am not sure – except that I expect that you will watch all course videos carefully – and you will be responsible for all material presented in that format.***

**Course Policies**

**Mask Policy**

Appropriate face coverings must be properly worn – covering both mouth and nose – by  
everyone (including all faculty, staff, students, vendors, and visitors) while on property owned or  
governed by MSU and while participating in any indoor MSU-related or MSU-sponsored  
activities. If someone has a medical condition that prevents them from safely wearing a face  
covering, they should contact MSU’s Resource Center for Persons with Disabilities (RCPD) to  
begin the accommodation process. They must receive documents attesting to their exemption  
from the mask mandate before entering an MSU building without a mask.

You should refrain from eating or drinking during class to avoid having to remove masks.

As per university policy, if a student is not wearing a proper face covering during class, I will  
address the situation using the following progressive steps:

1. Remind the entire class of the mask requirement and request that everyone comply.
2. Directly request a non-compliant student to either comply with the mask requirement  
   or leave the building. If a student has forgotten their mask, they will be allowed to leave  
   to go get one. Refusal to wear a mask warrants a referral for disciplinary action.
3. If a direct request to comply with the mask mandate is ignored, I will inform the class  
   that the entire class will be dismissed for the day unless everyone is in compliance  
   with the mask mandate.
4. If a non-compliant student refuses to wear a mask or leave the classroom, class will be  
   dismissed

**Special Considerations related to COVID-19**  
Please read the Michigan State University Community Compact regarding COVID-19 (https://msu.edu/together-wewill/msu-community-compact/). If you need to self-isolate due to COVID-19, please let me know and I will work with you to ensure illness or self-isolation does not harm your performance or put you at a disadvantage in the class.

**Academic Honesty**  
Article 2.III.B.2 of the Academic Rights and Responsibilities states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." In addition, the Psychology Department adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of Scholarship and Grades; and Ordinance 17.00, Examinations. See Spartan Life Online (splife.studentlife.msu.edu) and/or the MSU Web site  
(msu.edu) for more.

Therefore, unless authorized by your instructor, you are expected to complete all course  
assignments, including homework, lab work, quizzes, tests and exams, without assistance from  
any source. You are expected to develop original work for this course; therefore, you may not  
submit course work you completed for another course to satisfy the requirements for this  
course. Also, you are not authorized to use the www.allmsu.com Web site to complete any  
course work in this course. Students who violate MSU academic integrity rules may receive a  
penalty grade, including a failing grade on the assignment or in the course. Contact your  
instructor if you are unsure about the appropriateness of your course work. (See also the  
Academic Integrity webpage.)

**Limits to Confidentiality**  
Materials submitted for this class are generally considered confidential pursuant to the  
University's student record policies. However, students should be aware that University  
employees, including instructors, may not be able to maintain confidentiality when it conflicts  
with their responsibility to report certain issues to protect the health and safety of MSU  
community members and others. As the instructor, I must report the following information to  
other University offices (including the Department of Police and Public Safety) if you share it  
with me:

* Suspected child abuse/neglect, even if this maltreatment happened when you were a  
  child,
* Allegations of sexual assault or sexual harassment when they involve MSU students,  
  faculty, or staff, and
* Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about  
the incident that you have shared. In almost all cases, it will be your decision whether you wish  
to speak with that individual. If you would like to talk about these events in a more confidential  
setting you are encouraged to make an appointment with the MSU Counseling Center.

**Accommodations for Students with Disabilities**  
From the Resource Center for Persons with Disabilities (RCPD): Michigan State University is  
committed to providing equal opportunity for participation in all programs, services and  
activities. Requests for accommodations by persons with disabilities may be made by contacting  
the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at  
rcpd.msu.edu. Once your eligibility for an accommodation has been determined, you will be  
issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project,  
etc.). Requests received after this date will be honored whenever possible.

If you require testing accommodations (additional time, less disruptive room, etc.) you must  
contact me and present your VISA at least two weeks before the exam date to schedule an  
alternative exam. Typically, I will schedule for you to take the exam during a special exam  
session offered by the Psychology Department. Those exams occur in small group settings and  
are offered every Tuesday at 5:00pm and Friday at 9:00am in Giltner 346. If you are unable to  
make either of those times, or that option does not meet your VISA accommodations, you may  
be able to schedule to take your exam at the RCPD office. In either case, the exam must be  
scheduled well in advance, so you need to adhere to the two-week prior notification  
requirement.

**Disruptive Behavior**  
Article 2.III.B.4 of Student Rights and Responsibilities for students at Michigan State University  
states: "The student's behavior in the classroom shall be conducive to the teaching and learning  
process for all concerned." Article 2.III.B.10 states that "The student and the faculty share the  
responsibility for maintaining professional relationships based on mutual trust and civility."  
General Student Regulation 5.02 states: "No student shall . . . obstruct, disrupt, or interfere with  
the functions, services, or directives of the University, its offices, or its employees (e.g., classes,  
social, cultural, and athletic events, computing services, registration, housing and food services,  
governance meetings, and hearings).” Students whose conduct adversely affects the learning  
environment may be subject to disciplinary action through the Student Judicial Affairs office.