



Course Information

Course Title: Special Topics in Hearing and Speech Sciences; Quantitative Methods for Hearing, Speech, and Language Sciences

Course Number: HESP 639E

Term: Spring 2022

Credits: 3

Course Times: Thursdays, 3:30-6 pm

Professor: Matthew Goupell

Pronouns: He/Him

Office Phone: (301) 405-8552

Email: goupell@umd.edu

Office Hours: By appointment

Classroom: Online & Synchronous

Course Description

This course teaches quantitative methods related to Hearing, Speech, and Language Science research. This includes data representation and visualization, calculation of descriptive statistics, estimation and hypothesis testing. Learning to use data analysis in Excel and statistical computer packages like SPSS is emphasized as a core competency of the course.

Course Objectives & Learning Outcomes

After successfully completing this course you will be able to:

- Perform basic data visualization in Excel
- Calculate descriptive statistics
- Learn to use SPSS to:
 - Perform regressions and correlations
 - Perform paired comparisons
 - Perform post-hoc testing

Required Resources

- Course Website: elms.umd.edu

Course Structure

This is a flipped course. Panopto videos and ELMS exercises will be provided for learn the basic material during asynchronous class time. Synchronous classes will be in a computer lab, where we will work on visualizing and analyzing data together. A quiz

Potential COVID Disruption

Since it is difficult to plan for the future right now, students should expect to meet in person with the possibility that any given lecture may have to switch to zoom. I will try to stay as flexible as is reasonable with deadlines; please stay flexible with respect to the possible need to alter the schedule and syllabus.

Because of the setup of the class, it is possible to do most of the work without coming to the synchronous class portion, and attendance is not mandatory.

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:

- Academic integrity
- Student and instructor conduct
- Accessibility and accommodations
- Attendance and excused absences
- Grades and appeals
- Copyright and intellectual property

Please visit <https://gradschool.umd.edu/faculty-and-staff/course-related-policies> for the Graduate School's full list of campus-wide policies and follow up with me if you have questions.

Names/Pronouns and Self-Identifications

The University of Maryland recognizes the importance of a diverse student body, and we are committed to fostering inclusive and equitable classroom environments. 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 (he/him, she/her, they/them, etc.). The pronouns someone indicates are not necessarily indicative of their gender identity. Visit trans.umd.edu to learn more.

Additionally, 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 will do my best to address and refer to all students accordingly, and I ask you to do the same for all of your fellow Terps.

Inclusive Learning Environment and Hate-Bias Reporting

Students will be invited to share their thoughts in class and a diversity of opinions is welcome. Respectful communication is expected, even when expressing differing perspectives. Supporting one's statements with research findings is encouraged. In accordance with free speech statutes, speech that contains threats of violence is prohibited.

As a human, behavior-centered discipline, we value a strong understanding of diversity. Diversity refers to differences in race, ethnicity, culture, gender, sexual orientation, religion, age, abilities, class, nationality, and other factors. The Department of Hearing and Speech Sciences at the University of Maryland is committed to creating a respectful and affirming climate in which all students, staff, and faculty are inspired to achieve their full potential.

We believe that actively fostering an affirming environment strengthens our department as a whole. A department that values and celebrates diversity among its students, staff, and faculty is best able to develop the strengths and talents of all members of the department community.

Reporting Racism and Other Forms of Hate and Bias. If you experience racism or other forms of bias or hate in this class or any HESP course, we encourage you to do at least one of the following:

Please report the experience to the instructor and/or report all incidents of hate and bias to the Office of Diversity and Inclusion at <https://www.diversity.umd.edu/hbrp/>.

Statement of Basic Needs. Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, is encouraged to use the resources listed below for support.

Fostering Terp Success: <https://www.studentaffairs.umd.edu/fostering-terp-success>

UMD Campus Pantry: <http://campuspantry.umd.edu/>

UMD Student Crisis Fund: <http://www.crisisfund.umd.edu/>

Counseling Center: <http://www.counseling.umd.edu/CS/>

If there is any way that we can support you in these or other ways, I would really like to help. Please rely on me as a resource. I view it is my responsibility to help ensure your safety and well-being.

A Resource for Diversity in Our Field

We want to direct all students to [The SPARK Society](#), whose “mission is to establish a society of Cognitive Scientists of color that improves the visibility of its membership and creates mentorship opportunities for junior cognitive psychologists of color. The mission of SPARK is to increase the numbers of Black/African Americans, Latinx, and Native Americans in cognitive psychology, cognitive science, linguistics, and cognitive neuroscience. Our mission is to create a national network for undergraduates, graduate students, postdoctoral scholars, and faculty.” We encourage you all to browse the content on the website, ask questions, join relevant groups, and get involved!

Communication with the Instructor:

Email: If you need to reach out and communicate with me, please email me at goupell@umd.edu. Please do not email with questions that are easily found in the syllabus or on ELMS (i.e., When is this assignment due? How much is it worth? etc.) but please DO reach out about personal, academic, and intellectual concerns/questions.

I tend to respond to emails within 24-48 hours, typically at 8:00-9:00 AM or 12:00pm-5:00 PM EST, Monday-Friday.

ELMS: I will send IMPORTANT announcements via ELMS messaging. Please make sure that your email & announcement notifications (including changes in assignments and/or due dates) are enabled in ELMS so you do not miss any messages. You are responsible for checking your email and ELMS inbox with regular frequency.

Communication with Peers:

With a diversity of perspectives and experience, we may find ourselves in disagreement and/or debate with one another. As such, it is important that we agree to conduct ourselves in a

professional manner and that we work together to foster and preserve a virtual classroom environment in which we can respectfully discuss and deliberate controversial questions.

I encourage you to confidently exercise your right to free speech—bearing in mind, of course, that you will be expected to craft and defend arguments that support your position. Keep in mind, that free speech has its limit and this course is NOT the space for hate speech, harassment, and derogatory language. I will make every reasonable attempt to create an atmosphere in which each student feels comfortable voicing their argument without fear of being personally attacked, mocked, demeaned, or devalued.






Any behavior (including harassment, sexual harassment, and racially and/or culturally derogatory language) that threatens this atmosphere will not be tolerated. Please alert me immediately if you feel threatened, dismissed, or silenced at any point during our semester together and/or if your engagement in discussion has been in some way hindered by the learning environment.

Grading Structure

Academic Integrity

The University's [Code of Academic Integrity](#) is designed to ensure that the principles of academic honesty and integrity are upheld.

To help you avoid unintentional violations, ***the following table*** lists levels of collaboration that are acceptable for each type of assignment. If you ever feel pressured to comply with someone else's academic integrity violation, please reach out to me straight away. Also, ***if you are ever unclear*** about acceptable levels of collaboration, ***please ask!***

	 OPEN NOTES	 USE BOOK	 SEARCH ONLINE	 ASK FRIENDS	 WORK IN GROUPS
Asynchronous Assignments	✓	✓	✓	✓	✓
Synchronous Class Assignments	✓	✓	✓	✓	✗
Post Class Assessments	✓	✓	✓	✗	✗
Final Exam	✗	✗	✗	✗	✗

Grades

Learning Assessments	#	Points Each	Category Total
Asynchronous Assignments	13 weeks	~20/week	~260
Synchronous Class Assignments	13	20	260
Weekly Post-Class Assessments	13	20	260
Final Exam	1	200	200
Total Points:			~980

Final Grade Cutoffs									
+	97%	+	87%	+	77%	+	67%		
A	94%	B	84%	C	74%	D	64%	F	<60%
-	90%	-	80%	-	70%	-	60%		

Late Work and Make Up Assignments

In typical semesters, I have a very clear and firm policy around late assignments or making up exams and other graded work. **However, it is important that we all recognize that this is not a typical semester.** The COVID-19 pandemic has put unusually high stress and difficulty on everyone, including the students and instructor of this class. Therefore, I anticipate that there will be many more excused absences this semester than in past semesters. To address this, I have made the following adjustments to the course:

- All assessments are asynchronous, and can be completed by the students at any point during a one-week time span. The one exception is the final exam. My hope is that this flexibility will allow students to fully participate.
- I will assume all late assignments have a good reason. Therefore, reasonable extensions will be allowed (and arranged with me as soon as you can).
- I will assume all absences are excused absences. For this reason, the weekly synchronous active practices will be optional, and not required for students to be successful in the course.
- Students will have the opportunity to turn in late work without penalty. My request is that:
 - Please keep me informed as soon as possible about your circumstances, and your needs for extensions. I ask that you let me know about a need for an extension before the assignment is due.
 - Unexcused late assignments are given 50% credit.
 - Please note that I will not be able to provide answer keys until all students have submitted their work. Therefore, please do not abuse this flexibility.
 - I reserve the right to adjust this policy if this flexibility causes a major problem.

Course Outline

Date	Class Number	Between Class Topics	In Class Topics/Exercises
1/27/2022	1	--	Syllabus, Intro, Excel
2/3/2022	2	Descriptive Statistics: Central Tendency, Sample Properties, Distributions	Excel
2/10/2022	3	Validity, Reliability, Writing Hypotheses, Basic Probability, and Significance	Excel
2/17/2022	4	Intro to Statistical Inference, Confidence Intervals	Excel
2/24/2022	5	Regression and Correlation	Excel
3/3/2022	6	Paired Comparisons: T-tests, Correcting for Multiple Comparisons, Type I and II errors	Excel
3/10/2022	7	1-way ANOVA	SPSS
3/17/2022	8	1-way ANOVA and post-hoc testing	SPSS
3/24/2022		<i>UMD Spring Break</i>	
3/31/2022	9	N-way ANOVA	SPSS
4/7/2022	10	Post-hoc testing for Complex Interactions	SPSS
4/14/2022	11	RM ANOVA, ANCOVA, MANOVA	SPSS
4/21/2022	12	Multiple Regression; Non-Parametric Tests and Regression	SPSS
4/28/2022	13	Non-Parametric Tests and Paired Comparisons	SPSS
5/5/2022	14	Power and Reproducibility, Intro to Multi-Level Models, Course Review	Course Review
5/12/2022	15	--	Final Exam

Note: This is a tentative schedule, and subject to change as necessary – please monitor the course ELMS page for current deadlines. In the event of a prolonged university closing, or an extended absence from the university, we will adjust the course schedule, deadlines, and assignments based on the duration of the closing and the specific dates missed.

Resources & Accommodations

Accessibility and Disability Services

The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational, working, and living environment for people of all abilities. The University of Maryland is also committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the University, or be subjected to discrimination. The [Accessibility & Disability Service \(ADS\)](#) provides reasonable accommodations to qualified individuals to provide equal access to services, programs and activities. ADS cannot assist retroactively, so it is generally best to request accommodations several weeks before the semester begins or as soon as a disability becomes known. Any student who needs accommodations should contact me as soon as possible so that I have sufficient time to make arrangements.

For assistance in obtaining an accommodation, contact Accessibility and Disability Service at 301-314-7682, or email them at adsfrontdesk@umd.edu. Information about [sharing your accommodations with instructors, note taking assistance](#) and more is available from the [Counseling Center](#).

Student Resources and Services

Taking personal responsibility for your own learning means acknowledging when your performance does not match your goals and doing something about it. I hope you will come talk to me so that I can help you find the right approach to success in this course, and I encourage you to visit [UMD's Student Academic Support Services website](#) to learn more about the wide range of campus resources available to you.

In particular, everyone can use some help sharpening their communication skills (and improving their grade) by visiting [UMD's Writing Center](#) and schedule an appointment with the campus Writing Center.

You should also know there are a wide range of resources to support you with whatever you might need ([UMD's Student Resources and Services website](#) may help). If you feel it would be helpful to have someone to talk to, visit [UMD's Counseling Center](#) or [one of the many other mental health resources on campus](#).

Technology Policy

Please refrain from using cellphones, particularly email and social media, during class sessions.

Netiquette Policy

Netiquette is the social code of online classes. Students share a responsibility for the course's learning environment. Creating a cohesive online learning community requires learners to support and assist each other. To craft an open and interactive online learning environment, communication has to be conducted in a professional and courteous manner at all times, guided by common sense, collegiality and basic rules of etiquette.

Participation

- Given the interactive style of this class, attendance to synchronous classes are strongly encouraged but not mandatory. Attendance is particularly important also because class discussion and collaborative group work will be a critical component for your learning.
- Each student is expected to make substantive contributions to the synchronous learning experience by preparing before class with the asynchronous material.
- Students with a legitimate reason to miss a synchronous session should communicate in advance with the instructor, except in the case of an emergency.
- Students who miss a synchronous session are responsible for learning what they miss from that session.

Course Evaluation

Please submit a course evaluation through CourseEvalUM in order to help faculty and administrators improve teaching and learning at Maryland. All information submitted to CourseEvalUM is confidential. Campus will notify you when CourseEvalUM is open for you to complete your evaluations for fall semester courses. Please go directly to the [Course Eval UM website](#) to complete your evaluations. By completing all of your evaluations each semester, you will have the privilege of accessing through Testudo, the evaluation reports for the thousands of courses for which 70% or more students submitted their evaluations.

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