PSYC 6300.001: Seminar on Meta-Analysis in Psychology

Spring 2022

Instructor Information

Instructor(s) Jared Kenworthy

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Faculty Profile My <u>faculty profile</u>

Office Hours Tuesdays 1:30 – 2:30 or by appointment

Course Information

Section Information

PSYC 6300, section 001

Time and Place of Class Meetings

18 Jan - 03 Feb: Live, synchronous zoom meetings

Tuesdays & Thursdays 9:30 - 10:50 am

Join Zoom Meeting https://us02web.zoom.us/j/9045368805?pwd=UEI4NzdjWmoybnNrODAvelBPdlQ4Zz09

Meeting ID: 904 536 8805 Passcode: 6300

After 03 February (**this may change!): On campus – LS 102 Tuesdays & Thursdays 9:30 – 10:50 am

Description of Course Content

This seminar will cover the purposes, advantages, and limitations of quantitative research synthesis, or meta-analysis. We will discuss the formulation of research questions, literature search methodologies,

analytical strategies, and reporting of meta-analytic findings. We will also cover the calculation of various types of effect sizes, as well as the coding, organization, and interpretation of meta-analytic data.

Student Learning Outcomes

Participants in this seminar will gain both a conceptual and a practical understanding of meta-analytic purposes, methods, analyses, and interpretation.

Required Textbooks and Other Course Materials

Borenstein, M., Hedges, L.V., Higgins, J.P.T., & Rothstein, H.R. (2009). Introduction to Meta-Analysis. Croydon, UK: Wiley. Also available from the UTA library as an ebook.

Meta-Essentials

Optional online resource: Lipsey & Wilson: Practical meta-analysis: http://www.netlibrary.com/Details.aspx?ProductId=63274

Online effect size calculator: http://cebcp.org/practical-meta-analysis-effect-size-calculator/

Descriptions of major assignments and examinations

Cumulative meta-analysis project presentation: There is no exam or paper due for this seminar, but you will be expected to conduct a meta-analysis on a topic of your choosing, and to present your cumulative efforts in class during scheduled discussion sessions. More details will be provided in class.

Guided discussions: You will guide one or more discussions of some course readings during the second half of the course. This includes presenting the theory, methods, results, interpretation, and critiques of the paper. You will also present 2-3 novel primary-level research designs based on the findings of the paper.

Technology Requirements

The use of Canvas and Zoom will be required in this course.

Grading Information

Grading

Your course grade will be based on your participation in informal and guided discussions, as well as demonstrated effort on the cumulative project presentation.

Course Schedule

Week 1				
18-Jan	1. Syllabus & course introduction			
20-Jan	2. Overview of meta-analysis	Text: Preface; Chapters 1, 2, 28, 43		
Week 2				

25-Jan	3. Overview of meta-analysis	Text: Chapter 40 Cooper & Lemke, 1991; Kirsch et al., 2008			
27-Jan	4. Formulation of meta-analytic questions	Rethorst et al., 2009			
	Week 3				
01-Feb	5. Literature search methods	Harrigan et al., 2004			
03-Feb	6. Coding of studies				
	Week 4	ł			
08-Feb	7. Coding of studies	Mullen et al., 1991; Carlson & Miller, 1987			
10-Feb	8. Theory-testing; high-inference coding	Cialdini & Fultz, 1990; Miller & Carlson, 1990			
	Week 5	5			
15-Feb	9. Cumulative project presentations #1	Formulation of problem, literature search, and coding of variables			
17-Feb	10. Calculating effect sizes	Text: Chapters 3-6 Schutter, 2009 (+ corrigendum)			
	Week	6			
22-Feb	11. Calculating effect sizes	Text: Chapters 7-8 Buscemi et al., 2007			
24-Feb	12. Analysis				
Week 7					
01-Mar	13. Analysis	Text: Chapters 10-14			
03-Mar	14. Analysis				
Week 8					
08-Mar	15. Cumulative project presentations #2	Effect sizes calculated, presented, averaged, and interpreted			
10-Mar	16. Publication bias	Text: Chapter 30 Carlson et al., 1988			
SPRING BREAK					
	Week 9				
22-Mar	17. Heterogeneity and moderation	Werb et al., 2011			
24-Mar	18. Writing methods, results, discussion	Text: Chapter 41 Twenge et al., 2004			
Week 10					
29-Mar	19. Cumulative project presentations #3	Publication bias, heterogeneity scores, moderation			
31-Mar	20. Critical evaluation of meta-analysis	Elvik, 2013			
Week 11					
05-Apr	21. Cumulative meta-analysis	Text: Chapter 42 Mullen et al., 2001			
07-Apr	22. Criticism of meta-analysis	Text: Chapter 43			
Week 12					

12-Apr	23. Power	Text: Chapter 29		
14-Apr	24. Cumulative project presentations #4	Summary, take-away message; novel research ideas		
Week 13				
19-Apr	25. Guided discussions	TBA		
21-Apr	26. Guided discussions	TBA		
Week 14				
26-Apr	27. Guided discussions	TBA		
28-Apr	28. Guided discussions	TBA		
Week 15				
03-May	29. Guided discussions	TBA		
Finals Week				
05-May	Thur, 05 MAY 2022, 11.00 am - 1.30 pm, in class			
This schedule is subject to change.				

Institutional Information

UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the <u>Institutional</u> <u>Information</u> page (https://resources.uta.edu/provost/course-related-info/institutional-policies.php) which includes the following policies among others:

- Drop Policy
- Disability Accommodations
- Title IX Policy
- Academic Integrity
- Student Feedback Survey
- Final Exam Schedule

Additional Information

Face Covering Policy

While the use of face coverings on campus is no longer mandatory, all students and instructional staff are strongly encouraged to wear face coverings while they are on campus. This is particularly true inside buildings and within classrooms and labs where social distancing is not possible due to limited space. If a student needs accommodations to ensure social distancing in the classroom due to being at high risk they are encouraged to work directly with the Student Access and Resource Center to assist in these accommodations. If students need masks, they may obtain them at the Central Library, the E.H. Hereford University Center's front desk or in their department.

Attendance

At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator of student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, my policy is that you should attend all sessions unless you have a legitimate excuse. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to verify Federal Student Aid recipients' attendance in courses. UT Arlington instructors should be prepared to report the last date of attendance as part of the final grading process. Specifically, when assigning a student a grade of F, faculty must report the last date a student attended their class based on

evidence of academic engagement such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.

Distance education courses require regular and substantive online interaction and participation. Students must participate in online course activities to demonstrate attendance; logging into an online class is not sufficient by itself to demonstrate attendance

Emergency Exit Procedures

Should we experience an emergency event that requires evacuation of the building, students should exit the room and move toward the nearest exit, which is located out of the door and either to the left or right. When exiting the building during an emergency, do not take an elevator but use the stairwells instead. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Emergency Phone Numbers

In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381