Nutrition Research Method: Systematic Review

Class Periods: Tuesdays, periods 7-8, 1:55-3:50pm

Thursdays, period 7, 1:55-2:45pm *Location:* AFPL 101

Academic Term: Fall 2021

Instructor:

Jeanette Andrade, PhD, RDN, LDN, FAND Jandrade1@ufl.edu 352-294-3975

Office Hours: Mondays and Wednesdays from 12-1pm or by appointment

Course Description

Introduces students to methods for conducting systematic reviews in nutrition and other areas of health and wellness.

Course Pre-Requisites / Co-Requisites

None

Course Objectives

At the completion of this course students will be able to:

- 1. Formulate a key research question based on PICO format.
- 2. Organize a literature search.
- 3. Abstract relevant information from appropriate studies in a systematic manner.
- 4. Rate the scientific quality of articles.
- 5. Interpret the pattern of evidence in terms of strength and consistency.

Materials and Supply Fees

None

Required Textbooks and Software

- Gough D, Oliver S, Thomas J. An Introduction to Systematic Reviews, 2nd Ed. Sage Publications, Thousand Oaks: CA: 2017.
- Access to FREE systematic review database system, Covidence. Please register through: https://guides.uflib.ufl.edu/Covidence
- Additional course information and materials will be posted on E-Learning in Canvas (http://lss.at.ufl.edu/).

Weekly Reading Schedule:

Week 1:

- Gough, Ch. 1, 4
- Kroeze W, Werkman A, Brug J. A systematic review of randomized trials on the effectiveness of computer-tailored education on physical activity and dietary behaviors. Ann Behav Med. 2006 Jun;31(3):205-23. doi: 10.1207/s15324796abm3103_2. PMID: 16700634.
- Lichtenstein DA, Mezière GA. Relevance of lung ultrasound in the diagnosis of acute respiratory failure: the BLUE protocol. Chest. 2008 Jul;134(1):117-25. doi: 10.1378/chest.07-2800. Epub 2008 Apr 10. Erratum in: Chest. 2013 Aug;144(2):721. PMID: 18403664; PMCID: PMC3734893.
- Moher, D; Tsertsvadze, A; Tricco, A; Eccles, M; Grimshaw, J; Sampson, M; Barrowman, N. When and how to update systematic reviews. Cochrane Database of Systematic Reviews. 2008. John Wiley & Sons, Ltd. https://doi.org//10.1002/14651858.MR000023.pub3.

Week 2:

- Gough, Ch 5.
- Li T, Higgins JPT, Deeks JJ (editors). Chapter 5: Collecting data. In: Higgins JPT, Thomas J, Chandler J, Cumpston M, Li T, Page MJ, Welch VA (editors). Cochrane Handbook for Systematic Reviews of Interventions version 6.1 (updated September 2020). Cochrane, 2020. Available from www.training.cochrane.org/handbook.

Week 3:

- Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, Ioannidis JPA et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate healthcare interventions: explanation and elaboration BMJ 2009; 339
- Norris SL, Holmer HK, Ogden LA, Burda BU. Conflict of interest in clinical practice guideline development: a systematic review. PLoS One. 2011;6(10):e25153. doi: 10.1371/journal.pone.0025153. Epub 2011 Oct 19. PMID: 22039406; PMCID: PMC3198464.

Week 5:

• Gough, Ch. 6,7

Week 6:

• Gough, Ch. 10

Week 7:

• Gough, Ch. 8

Week 8:

• Gough, Ch. 9

Assignments

Assignments are due on the dates indicated on the syllabus. Late assignments will be penalized 10% for each day late for up to 5 days including weekends.

Course Schedule

Week	Topic	Assignments due: Thursday by 1159pm
1	Overview of a systematic review/ Identifying a topic	
2	Formulating a research question	
3	Developing a protocol	PICO research question
4	Searching the literature	
5	Title/Abstract Screening	Keywords and databases
6	Full text screening	
7	Data extraction	
8	Assessing the quality of the articles: RCTs	Outline of manuscript
9	Assessing the quality of articles: non-RCTs	
10	Making sense of the data	
11	Publication bias	
12	Introduction to effect sizes	Data extraction table/ PRISMA figure
13	Writing the report	
14	Peer-review process	
15	Presentations	Presentation
16	Final week	Draft manuscript due

Attendance Policy, Class Expectations, and Make-Up Policy

Per University Policy, attendance is expected at all class sessions. When an absence does occur, the student is responsible for the material covered during the absence. When possible, the student should notify the instructor in advance of an anticipated absence. Dr. Andrade will grant make-up privileges (when possible) to students for properly verified absences due to illness, emergency, or participation in an official University activity. Excused absences must be consistent with university policies in the <u>Graduate Catalog</u> and require appropriate documentation. Additional information can be found in Attendance Policies.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
PICO research question	10	7%
Keywords and databases	10	7%
Outline of manuscript	30	20%
Data extraction table/	20	13%
PRISMA figure		
Presentation	25	17%
Draft manuscript	55	36%
	150	100%

Grading Policy

Percent	Grade	Grade Points
90.0 - 100.0	A	4.00
87.0 - 89.9	A-	3.67
84.0 - 86.9	B+	3.33
81.0 - 83.9	В	3.00
78.0 - 80.9	B-	2.67
75.0 - 79.9	C+	2.33
72.0 - 74.9	C	2.00
69.0 - 71.9	C-	1.67
66.0 - 68.9	D+	1.33
63.0 - 65.9	D	1.00
60.0 - 62.9	D-	0.67
0 - 59.9	Е	0.00

More information on UF grading policy may be found at:

UF Graduate Catalog

Grades and Grading Policies

Students Requiring Accommodations

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the <u>Disability Resource Center</u>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing <u>online evaluations via GatorEvals</u>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students here.

University Honesty Policy

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

Recording in class

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a

complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A "class lecture" is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited.

To "publish" means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

Software Use

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the <u>Notification to Students of FERPA Rights</u>.

Campus Resources:

Health and Wellness

- *U Matter, We Care*: If you or someone you know is in distress, please contact <u>umatter@ufl.edu</u>, 352-392-1575, or visit <u>U Matter, We Care website</u> to refer or report a concern and a team member will reach out to the student in distress.
- Counseling and Wellness Center: <u>Visit the Counseling and Wellness Center website</u> or call 352-392-1575 for information on crisis services as well as non-crisis services.
- *Student Health Care Center*: Call 352-392-1161 for 24/7 information to help you find the care you need, or <u>visit</u> the Student Health Care Center website.
- *University Police Department*: <u>Visit UF Police Department website</u> or call 352-392-1111 (or 9-1-1 for emergencies).
- *UF Health Shands Emergency Room / Trauma Center:* For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; <u>Visit the UF Health Emergency Room and Trauma Center website</u>.

Academic Resources

- *E-learning technical support*: Contact the <u>UF Computing Help Desk</u> at 352-392-4357 or via e-mail at <u>helpdesk@ufl.edu</u>.
- <u>Career Connections Center</u>: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.
- <u>Library Support</u>: Various ways to receive assistance with respect to using the libraries or finding resources.

- <u>Teaching Center</u>: Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.
- Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.
- Student Complaints On-Campus: <u>Visit the Student Honor Code and Student Conduct Code webpage for more information</u>.