Instructor: Jeanette Andrade PhD, RDN/LDN, FANDPhone: 352-294-3975Office: 467BEmail: jandrade1@ufl.eduOffice Hours: Wednesday and Thursday from 2-4pm or by appointment

Course Description

In-depth study and application of nutrition knowledge and research through a systematic review/meta-analysis.

Pre-requisites:

Open to Food Science and Human Nutrition graduate students. A graduate student from another department may take this course with permission from the instructor.

Course Objectives

Upon completion of this course, students will

- a. Select appropriate procedures for collecting, analyzing, and interpreting data
- b. Examine the ethical standards for research
- c. Apply evidence-based guidelines when drafting the systematic review/meta-analysis and technical presentation
- d. Demonstrate proficiency in professional technical oral and written communication skills

Activities and assignments completed in this course contribute to the achievement of the following ACEND competencies:

- CRDN 1.2 Apply evidence-based guidelines, systematic reviews and scientific literature
- CRDN 1.4 Evaluate emerging research for application in nutrition and dietetics practice
- CRDN 1.5 Conduct projects using appropriate research methods, ethical procedures and data
- CRDN 1.6 Incorporate critical thinking skills in overall practice
- CRDN 2.2: Demonstrate professional writing skills in preparing professional communications.

Course Policies and Procedures

Grades are not curved and are not negotiable.

All assignments **must be typed**. All assignments must be submitted (or post-marked) by 5:00 PM on the day they are due unless otherwise indicated in the syllabus. Beginning with the due date, course work turned in late will be penalized by deducting 10% per day for up to 5 days from the total value of the assignment.

Other: Additional course information and materials will be posted on E-Learning in Canvas (http://lss.at.ufl.edu/) and/or available through the Marston Science Library online reserve system (Ares), the Academy of Nutrition and Dietetics website or other resources needed to complete assignments.

Student Preparation for Class: Students are expected to complete reading assignments in advance. Class preparation may require use of the Internet, library and/or other reference materials. Students are expected to bring materials printed from E-Learning in Canvas or other sites to class.

How to Access E-Learning:

- Access requires a Gatorlink account. If you need to establish a Gatorlink account, go to http://www.gatorlink.ufl.edu/.
- Once you have created a Gatorlink account, access e-Learning Support Services homepage at http://lss.at.ufl.edu. Select "e-Learning Login". Log in using your Gatorlink ID. FYC 6934 should be listed under "My Workspace". If you are unfamiliar with e-Learning in Sakai, select "Student Tutorials & FAQs from the menu.

Online Course Evaluation Process: Student assessment of instruction is an important part of efforts to improve teaching and learning. At the end of the semester, students are expected to provide feedback on the quality of instruction in this course using a standard set of university and college criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open for students to complete during the last two or three weeks of the semester; students will be notified of the specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results.

Academic Honesty: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit 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."

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: https://www.dso.ufl.edu/sccr/process/student-conducthonor-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.

Students with Disabilities: The Disability Resource Center coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation 0001 Reid Hall, 352-392-8565, www.dso.ufl.edu/drc/

Student Complaints: The following link describes the University of Florida's policy related to student complaints. Residential Course: https://www.dso.ufl.edu/documents/UF Complaints policy.pdf

Campus Helping Resources: Students experiencing crises or personal problems that interfere with their general wellbeing are encouraged to utilize the university's counseling resources. The Counseling & Wellness Center provides confidential counseling services at no cost for currently enrolled students. Resources are available on campus for students having personal problems or lacking clear career or academic goals, which interfere with their academic performance.

Service	Location	Phone	Web site	Services provided
University Counseling and Wellness Center	3190 Radio Road	352-392- 1575	www.counseling.ufl.edu/cwc/	 Counseling Services - individual and group Groups and Workshops Outreach and Consultation Self-Help Library Wellness Coaching Training Programs Community Provider Database
U Matter We Care		352-294- CARE	www.umatter.ufl.edu	Care-related programs and resources for students and employees
Career Resource Center	First Floor J. Wayne Reitz Union	352-392- 1601	www.crc.ufl.edu	Career development assistance and counseling

Other Information: Lecture material and information are the property of the University of Florida and the course instructor and may not be used for any commercial purpose. Students found in violation may be subject to disciplinary action under the University's Student Conduct Code. Only students formally registered for the course are permitted to attend lectures and take quizzes/tests.

Email: Students are required to check their email account(s) daily (at least Monday through Friday) and respond to course/program related requests, inquiries, etc. in a timely manner.

Attendance: Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx . 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.

Cell phone usage (e.g. talking, texting, Internet usage) is not allowed in this course. The cell phone is to be turned off (not on vibrate) and not visible (e.g. keep it in your bookbag). If the professor witnesses cell phone usage, then, you will be marked as absent and will be asked to leave class. If there is a special circumstance in which you need to have the phone on, you need to discuss this with the professor prior to the start of class. Dr. Andrade will have her cell phone available during class in case of an emergency.

Recommended Course Texts

Borenstein M, Hedges LV, Higgins JP, Rothstein HR. Introduction to Meta-Analysis. New York, NY: John Wiley and Sons Ltd; 2009.

Gough D, Oliver S, Thomas J. An Introduction to Systematic Reviews, 2nd Ed. Sage Publications, Thousand Oaks: CA; 2017.

Course Procedures: All Assignments due by 5pm in Canvas. Assignment rubrics can be found in Canvas for specific details

- 1. <u>Select and refine a topic of your choice</u>. Select a nutrition, dietetics, or foods topic that is a) of interest to you, b) current (information can be found in peer-reviewed journals within the last 10 years), and c) able to stimulate discussion by your classmates. Your topic must be approved by **week 3**.
- 2. <u>Identify, evaluate, and synthesize relevant literature</u>. As you read the literature, the emphasis should be on critical reading and reflection. Identify methodology strengths and weaknesses and evaluate the adequacy with which the conclusions are supported by the data. Keep a careful record of all pertinent references. You may wish to include a few historical or classic references. As you read and evaluate the literature, formulate a clear specific purpose statement. Your presentation should be designed to educate your classmates using a formal professional evidence-based presentation.
- 3. <u>Critique a systematic review and a meta-analysis</u>. Find a published systematic review and a meta-analysis in a refereed journal of your choice. Email or bring your articles to me by the end of the fourth week of class for approval (it should help your critique to have it in mind as we go through class, so the earlier you find your article, the better). Present your critique to the class. The critiques should contain:
 - a. Article citation,
 - b. A summary paragraph describing the central question(s) addressed by the author(s)
 - c. Your list of the pros and cons, plus the explanations of each. You should have 2 to 3 things they did well and 2 to 3 that could have been done better.
 - d. Your take on what additional research needs to be conducted.

The systematic review critique will be due **week 7** of class. The meta-analysis critique will be due **week 10** of class.

- 4. Write a systematic review/meta-analysis appropriate for publication. Manuscripts are due week 13, although you will be submitting parts of your manuscript throughout the semester. Your manuscript (between 4,000-6,000 words (this word count includes the introduction, methodology, results, discussion, and conclusion)) must reflect adequate synthesis of the literature reviewed (minimum of 50 sources) and include < a 200-word abstract. You need to follow AMA style for the entire paper.</p>
- 5. <u>Develop your oral presentation</u>. Using Power Point, design your visuals. Visuals include graphs, tables, appropriate photos and illustrations, animations and/or short video clips. In order to discourage reading the presentation, do not write out the presentation as you would a paper, but use the Notes Page option to type in phrases that will "jog your memory." Also, limit the words on each slide as to assist you in not reading the slide content. You must cite specific research to give credit to the investigators on your slides.
- 6. <u>Orally present your work</u>. Your presentation will be 25 minutes ± 3 minutes. For every minute less than 22 or over 28 minutes will result in a subtraction of a point per minute over or under. Presentations will occur in **weeks 13 & 14**.
- 7. <u>Develop your poster</u>. Posters are due **week 14**. Based on the systematic review paper, design a poster that addresses each component of your paper: abstract, intro, methods, results, discussion, and conclusion.
- 8. <u>Present your research as a poster presentation</u>. Week 15 you will present your revised poster to faculty and peers.
- 9. <u>Participate as a peer-reviewer</u>. You will be assigned a peer's manuscript and conduct a review using the **Manuscript Rubric**. Your comments from your review will be incorporated within my comments, but your identity will remain anonymous. Also, your critique will not impact your peer's manuscript grades. This review will be due in **week 15**.

Assignments	Points
Topic Selection Activity (obj. a)	5
Evaluate Published Systematic Review (obj. b&d)	5
Evaluate Published Meta-Analysis (obj. b&d)	5
Peer-review manuscript (obj. d)	25
Parts of manuscript	
Methods (obj. a,c,d)	15
Results (obj. a,c,d)	15
Poster (obj. c&d)	25
Oral Presentation (obj. c&d)	20
Total Manuscript (obj. a-d)	85
Total	200

Grading Scale. For further information about UF grading policy and assigning points, please refer to: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

A: 94-100%	A-: 90-93.5%	B+: 87-89.9%
188-200	180-187	174-179
B: 84-86.9%	B-: 80-83.9%	C+: 77-79.9%
168-173	160-167	154-159
C: 74-76.9%	C-: 70-73.9%	D+: 67-69.9%
148-153	140-147	134-139
D: 64-66.9%	D-: 60-63.9%	E: <60%
128-133	120-127	<119

Tentative Schedule

Date	Topic/Assignments	Suggested Readings
1/7	Overview of a Systematic Review/ Meta-analysis	Gough: Ch. 1, 4
		Borenstein: Ch. 1, 2
1/14	Identifying a topic/ Formulating a research question/	Gough: Ch 5
	Literature search	
1/21	No formal class, but Topic Selection Activity due	
1/28	Introduction to Methodology: Screening, Data Extraction	Gough: Ch 6, 7
2/4	Assessing Quality of Articles	Gough: Ch 10
2/11	Data Analysis: Systematic Review	Gough: Ch 8
2/18	Data Analysis: Meta-analysis Part A (effect sizes)	Gough: Ch 9
	Critique of Systematic Review due	Borenstein: Ch 3-8
2/25	Data Analysis: Meta-analysis Part B (fixed & random	Borenstein: Ch 10-14
	models)	
	Methodology due	
3/4	Spring break	
3/11	Data Analysis: Meta-analysis Part C (heterogeneity &	Borenstein: Ch 15, 16,
	power)	29, 41
	Critique of Meta-Analysis due	
3/18	Making sense of the data	Gough: Ch 11
	Results due	
3/25	Peer-review process	
4/1	Oral Presentations	
	Total Manuscript due	
4/8	Oral Presentations	
	Poster due in Canvas	
4/15	Oral Poster Presentation/ Peer-review Evaluation due	
4/22	Publishing in a journal	