

Systematic Review Methods
MMC 6936, section 05E0
Weimer Hall 1074
Tuesdays, 10:40-1:40

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Office Hours: By appointment

COURSE OVERVIEW

In this course, we will examine and practice the science and rigorous methodology of conducting a systematic review, using the PRISMA guidelines. Systematic reviews are considered to be one of the highest levels of evidence quality and are important studies in their own right. Each of you will finish the course 1) as a critical **consumer** of systematic reviews; and 2) equipped with the skills and experience necessary to **produce** your own systematic review. This course will prepare you to conduct a systematic review, which is more likely to be publishable as a stand-alone paper than a narrative review. The final products of the course will be: 1) participation and potential authorship in a collaborative in-class systematic review; and 2) your own systematic review protocol with a timeline and plan for completing the review.

The course has two overlapping components. For the first part, we will work on becoming critical consumers of systematic reviews through reading chapters of the textbook and reading and critiquing published systematic reviews. The second part of the course will be very hands-on: we will work together in two teams to conduct own systematic review(s) of a particular research question, while you are also working individually on producing your own protocols.

ASSIGNMENTS AND WEIGHTING

Readings Discussion: 15% of final grade

Each week you will have class readings (chapters or published reviews). We will discuss these in class, so I expect that you will have come to class having read these and being ready to discuss them. In preparing for these discussions, consider three things: what you learned, what surprised you, and what questions you still have.

Presentations: 10% each x 2 = 20% of final grade

Each of you will need to choose two systematic reviews to read and present to the class. These are noted on the course schedule as “first presentations” and “second presentations.” The expectations for the second presentations will be higher, as you will know more about

systematic review by that time. You will do both a presentation in class and submit a copy of the presentation via Canvas.

Class Project: 35% of final grade

A major part of this class is going to be participating in the method of a systematic review – from research question to data extraction. We will split into two review teams. Each student will receive a grade for this project based on both what is accomplished by the group and their participation, as rated by themselves and their group members. By the end of the class, the teams will have of the work done on the review(s) and can take them forward to publication over the summer or next fall.

Final Paper: 30% of final grade

As the final product of the class, each of you will write your own protocol for a systematic review, according to the structure on Prospero. Depending on the content of the review and when you are starting the review, you may also decide to post the review protocol on Prospero. As part of this process, you will each participate in a roundtable discussion to get feedback on your ideas and subsequently give a short presentation of your protocol to the class. I will share more specific details about the grading when the assignment is explained in class.

CLASS STRUCTURE

Generally, we will start each class period with a discussion of the assigned readings. Each week we will engage in some sort of practical activity or work on our class systematic review projects. I've outlined the readings, activities, and tasks for each week below. However, the activities on the course schedule are subject to change as needed given the direction of the class projects.

COURSE MATERIALS

There are three primary resources for our class readings:

Gough, Oliver & Thomas (2017). An Introduction to Systematic Reviews, 2nd Edition. London: Sage. This is abbreviated on the course schedule as "ISR."

Boland, Cherry and Dickson, Editors. (2017). Doing a Systematic Review: A Student's Guide. London: Sage. This is abbreviated on the course schedule as "DSR."

There will also be a few readings posted on the course website (Canvas).

OTHER INFORMATION

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>.

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

GRADES

A 93-100%

A- 90-92%

B+ 87-89%

B 83-86%

B- 80-82%

C+ 77-79%

C 73-75%

C- 70-72%

D+ 67-69%

D 63-66%

D- 60-62%

Failure 0-59%

Course Schedule

Week	In Class	Due
1 – August 20	Intro to Class and Systematic Reviews Presentation 1 Assignment and Sign up	
2 – August 27	No class	
3 – September 3	Readings Discussion <u>Practical Session:</u> The Anatomy of a Systematic Review (Chewning et al.) <u>Practical Session:</u> Discovering Prospero (bring laptop)	<i>ISR Chapters 1-3</i> <i>DSR Chapter 1</i> <i>Moher et al., 2015</i>
4 – September 10	Readings Discussion Presentation 1 <u>Team Project (TP):</u> Form Teams and Topic Discussion <u>Guest Speakers (former students in class)</u> Aantaki Raisa Devyn Mullis	<i>ISR 4</i> <i>DSR 2-3</i> <i>Thomas et al., 2017</i>
5 – September 17	<u>Guest Speaker:</u> Maggie Ansell, UF Health Librarian Readings Discussion Presentation 1 <u>TP:</u> Finalize Topic(s)	<i>ISR 5 (to p. 119)</i> <i>DSR 4</i>
6 – September 24	Readings Discussion Presentation 1 <u>TP:</u> Finalize Searches, Assign Protocol, Assign group roles Presentation 2 Assignment and Sign up	<i>Peterson et al., 2017</i> <i>Shen et al., 2018</i>

7 – October 1	<p>Reading Discussion</p> <p><u>Practical Sessions:</u> Abstract Coding in Covidence and Full-Text Screening in Covidence</p> <p><u>TP:</u> Work on protocols</p>	<p><i>ISR 5 (p. 119-122)</i> <i>DSR 5</i></p>
8 – October 8	<p>Reading Discussion</p> <p>Discuss Final Protocol Assignment</p> <p>Presentation 2</p> <p><u>Practical Session:</u> Data Extraction</p> <p><u>TP:</u> Work as needed, including protocol. (Goal: Ready to start searches)</p>	<p><i>ISR 6-8</i> <i>DSR 6</i></p>
9 – October 15	<p>No class</p> <p>Prisma-P Protocol for TP due (on canvas)</p>	
10 – October 22	<p>Reading Discussion</p> <p>Presentation 2</p> <p>Practical Session: Quality Assessments</p> <p><u>CP:</u> Work as needed (Goal: Pilot abstract screening process)</p>	<p><i>ISR 10</i> <i>DSR 7</i></p>
11 – October 29	<p>No class</p>	
12 – November 5	<p>Presentation 2</p> <p>Interpreting Meta-analyses</p> <p><u>TP:</u> Work as needed. (Goal: Abstract screening done).</p>	<p><i>DSR 8</i></p>
13 – November 12	<p>Reading Discussion</p> <p>TP: Work as needed. (Goal: Work on full text screening)</p>	<p><i>DSR 11</i></p>

14 – November 19	<p>Reading Discussion</p> <p><u>TP:</u> Work as needed (Goal: finish abstract screening/conflicts; make plan for full text screening)</p>	<i>DSR 9, 10</i>
15 – November 26	<p>Individual Protocol Topics Roundtable</p> <p><u>TP:</u> Work as needed (Goal: Pilot data extraction). Full Text Screening Should be done by today.</p>	
16 – December 3	<p>Individual Protocol Final Presentations</p> <p>Teams present to each other</p> <p><u>TP:</u> Each group meet with Dr. Bylund: Report on accomplishments; Tasks and timelines for moving forward.</p>	

Final Project Dates

By December 10:

Each group should submit:

- 1) Finalized PRISMA-P Protocol
- 2) PRISMA flow chart
- 3) Email outlining the plan for taking the paper forward (with all cc-d on it)

*As soon as that is turned in, I will send each member a 360 survey about their group experience.

By December 10:

Individual final written protocol due (on Canvas)