PSY 496 Lesson Plans

General lesson breakdown: Part 1: 1:40-2:50, 10 min break, Part 2: 3:00-4:10

Session 1 (1/17)

Part 1 - Start with Introduction, basic rules (attendance "tents", no laptops unless needed), syllabus overview (and malleability) (~10 min.?); then: icebreaker – students pair up to learn about their neighbor, then tell the class their neighbor's name, research project topic, and favorite movie or book or band (all of which lend themselves to follow-up questions). If this goes fast, we could add a round of "would you rather" scenarios (~30 min.?); followed by "why are you doing an honors thesis and what do you expect to get out of this class?" – write on an index card (plus your name) (~ 5 min.). (I'll collect them, will dig them back out for last session; maybe have a couple of students state theirs out loud?). This should bring up the topic of research career/graduate school, which will serve as the bridge to...

Part 2 - "How to get into....". Then have them fill out index cards on "what did you find particularly useful?" and "what did you find not useful?" (5 min.). End on giving clear instructions on assignments and preview next session.

Assignments for Session 2:

- **1- Graded assignment 1** (10%): Read Evans (2007) chapter, plus my slides ("Crafting a research question.ppt") and write a succinct draft (max. 8 sentences!) of your research question/project (What? Why? How?), which you will submit to Sakai and present orally as an "elevator pitch" (max 90 sec. minutes no reading!!) in the next class.
- **2- Graded Assignment 2** (5%): Read the Bem chapter and Kording & Mensh paper on writing an empirical research paper. Think about your own project and write down one specific challenge that you see (and why) with trying to implement their advice in writing your thesis paper. Submit this short note (3-4 sentences) to Sakai.

Session 2 (1/24)

Part 1 - We instruct students to break into group of 3s (prior to giving the pitch) and for each group to pay particular attention to their fellow group members' pitch and the feedback they receive from us. Students give their elevator pitch (NOT reading off!), which will be stop-watched to stay within 90 sec.! (Should take about 50-60min. total, including feedback). Then, once all pitches are done, the groups-of-3 give each other suggestions on how to improve their pitches and **reduce them down further – to 30 sec.!** (I.e., we ask students to tell each other what they absolute **core message** of their pitch should be. (10-15 min.). Break...

Part 2: Students briefly present their ultra boiled-down pitch (30 sec.!). (~15 min.?)

Thereafter: "lecture" on Research Article writing with emphasis on Introduction (~30-40 min.). End on giving clear instructions on assignments and preview next session.

Assignments for Session 3:

- **1- Graded assignment 3** (10%): Consult my lecture slides and read the Kendall et al. chapter, and employ two of the discussed strategies to write *two versions* of an opening paragraph for your thesis introduction (2-4 sentences each). Additionally, provide a commentary/justification as to which one you prefer, and why (2-3 sentences).
- **2- Graded assignment 4** (5%): read the Sternberg book chapter on crafting a title and abstract, and come up with 3 potential titles for your paper. Submit these titles to Sakai. You will present your opening gambit and title in the next class.

Session 3 (1/31)

Part 1 – Opening gambit discussion: Students *pair up* to discuss each student's 2 "opening gambit" suggestions, settling on the one they like best (10-15 min.). Then, each student presents their "winning" gambit and receives some feedback. (20-30 min.). Next, Students break up into *groups of 3* and discuss each student's 3 title suggestions, settling on the one they like best (15 min.). Then, each student presents their "winning" title and receives some feedback. (15-20 min.?). (Could also do title presentation after the break, if necessary!!

Part 2 – Lecture on Methods, Results, and Discussion section (40-60 min.). End on giving clear instructions on assignments and preview next session.

Assignments for Session 4 (and beyond):

- **1** Read the following articles on peer review:
 - Walsh et al. 2000.pdf
 - http://www.psychologicalscience.org/observer/twelve-tips-for-reviewers#.WGxYZbYrJ-U
 - <a href="https://www.washingtonpost.com/news/morning-mix/wp/2015/03/27/fabricated-peer-reviews-prompt-scientific-journal-to-retract-43-papers-systematic-scheme-may-affect-other-journals/?postshare=3741427469958229&utm term=.c4caa4cbc907
 - http://www.sciencemag.org/news/2015/08/pubpeer-s-secret-out-founder-controversial-website-reveals-himself
- **2- Graded assignment 5** (5%): For the next class, submit a short document to Sakai in which you note what you consider the two most important advantages and disadvantages of blind as compared to open peer review.
- **3- Graded assignment 6** (10%): Re-read the Kendall book chapter and consult my lecture slides to write a *full introduction draft* for your thesis paper following the structure we discussed in class (5-8 pages, double-spaced). For each section or paragraph, write a comment (1-2 sentences) that details the purpose or core message of that paragraph. Submission deadline on Sakai is **02/14**.

Session 4 (02/07)

Part 1 – Peer review discussion: form groups of 4-5 students and discuss advantages and disadvantages of blind vs. open peer review. As a group, do two things: 1- decide on whether you'd prefer your paper

to undergo blind or open review, 2- decide on whether if you were to review another student's paper, you'd prefer to remain anonymous or not, and 3- generate at least 3 suggestions for how we could potentially improve the peer review process (20 min.). Then, each group lets us know how they voted and what their suggestions for improved review are. Use whiteboard to gather inputs. Group discussion (~30 min). Break

Part 2 – Publishing a research article – we discuss the different stages of the publication process.

End on giving clear instructions on assignments and preview next session.

Assignments for Session 5

- **1-** Read the following articles on the "replication crisis" and on open science projects (the first two are obligatory):
 - Simmons et al. 2011.pdf
 - Spellman 2015.pdf
 - https://digest.bps.org.uk/2016/09/16/ten-famous-psychology-findings-that-its-been-difficult-to-replicate/
 - Open Science Collaboration 2015.pdf
 - Gilbert et al. 2016.pdf
- **2- Graded assignment 7** (5%): For the next class, submit a short document to Sakai in which you note all of the ways in which your own project deviates from the "open science"/replication-promoting approach to research, as described in Simmons et al. Table 2 (but you can go beyond those points and refer to others you saw in those reading materials).

Session 5 (02/14)

Part 1 – Open science/replication discussion. Group students into 3s and have them compare notes on how their own projects violate many tenets of open science. Then each group should generate as many barriers to conducting open science as they can come up with (15 min.?) – put those on the whiteboard. Then have them group up again and come up with at least 2 proposals for promoting more replicable findings in the literature. Put them on the whiteboard and discuss! (20 min?). Finish off part 1 with a brief web demo of what open code and data looks like (Christina?).

Part 2 – Fellowship applications: Introduce the idea of writing proposals, with specific reference primarily to NSF graduate research fellowship format. Discuss the "merit review criteria" and have students pair up to read a couple of example research statements and extract which information they would consider most relevant for giving the "intellectual merit" and "broader impact" scores.

Finally, in transition to next session, hand out and discuss a couple of "ethical dilemma" vignettes. This is stimulate their imagination for graded assignment 5.

End on giving clear instructions on assignments and preview next session.

Assignments for session 6 (and beyond)

- **1- Graded assignment 8** (5%): Describe an "ethical hot seat" dilemma in conducting research that you either have encountered, or could imagine encountering in your work (in 5 sentences or so). In the next class, some student will have to consider how they would handle your dilemma!
- **2- Graded assignment 9** (10%): Read the Reis book chapter on writing a Methods section and consult my lecture slides to write a *full Methods draft* for your thesis paper. Submission deadline on Sakai is **02/28**.

Session 6 (02/21)

Part 1 – Ethical dilemma discussion: We pull student names and dilemmas out of hat, and see what kind of solutions the students come up with (~60 min). Break

Part 2 – Fellowship writing exercise: have students pair up, and everyone gets 20 min to write a brief "intellectual merits" statement (max. 5 sentences) for his study; the 2 students then give each other feedback on the statements (10 min), and the revised statements get read out in class for additional feedback (40 min).

Assignments for session 7

Graded assignment 10 (5%): Write a brief (max 5 sentences) "broader impacts" statement for your research project, including a commentary on why you focus on the particular angle you choose to focus on.

Session 7 (02/28)

Part 1 – Work on refining the "broader impacts" statements: Students pair up and...

Part 2 -

Assignments for session 8 (and beyond)

- **1- Graded assignment 11** (10%): Read the Salovey chapter on crafting a Results section and consult my lecture slides to write a *full Results draft* for your thesis paper. Submission deadline on Sakai is **03/07**.
- **2** Think about what date(s) would suit you for your practice presentation. We will run a lottery for picking slots in the next class...

Session 8 (03/07)

Part 1 – Presentation on poster design (30 min), including critiquing example posters from previous years (15 min).

Part 2 - Scheduling of, and tips on, your practice presentation: Lecture slides, plus we run a little lottery for picking practice presentation dates, and then go over some basic rules and tips for the presentation (~60 min total)

Assignments for 03/21 (and beyond)

Graded Assignment 12 (10%): Read the Calfee chapter on writing a Discussion section and consult my lecture slides to write a *full Discussion draft* for your thesis paper. Submission deadline on Sakai is **03/21.**

Graded Assignment 13 (10%): Prepare and present oral slide presentation of your thesis project