

PUBH 8901

Professional Development for Public Health Doctoral Students School of Public Health The University of Memphis Spring 2014

Mondays, 5:30-8:30pm 235 Robison Hall

Instructor

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Course Description

This is one of two required seminar courses for all doctoral students in the School of Public Health. It will address a variety of professional and personal issues that are vital to success as a doctoral student and public health professional. A major portion of the course is dedicated to responsible conduct in research and public health ethics. Other topics include developing positive mentor/mentee relationships, time management, manuscript and grant writing, reviewing others' scientific work, delivering poster and oral presentations, teaching skills, preparing a curriculum vitae, and money management.

Course Prerequisite

Enrollment as a doctoral student in the School of Public Health

Learning Objectives

- 1. Recognize and discuss diverse issues important to educational and professional success
- 2. Analyze ethical principles applied to public health research and practice
- 3. Understand, evaluate, and apply accepted standards of responsible conduct in scientific research
- 4. Improve scientific writing skills
- 5. Understand the roles and responsibilities of mentors and mentees
- 6. Identify effective time management strategies
- 7. Prepare and deliver effective poster and oral presentations
- 8. Utilize effective strategies for identifying grant funding opportunities and writing successful research grants
- 9. Critically evaluate the quality of scientific manuscripts submitted for publication, and write and submit a professional-quality review to a journal
- 10. Recognize effective teaching approaches and strategies
- 11. Understand and utilize sound document design principles in creating a professional curriculum vitae

Communication

All written assignments should be submitted via email to the instructor at kdward@memphis.edu. The instructor will communicate with you, including notifying you when assignments have been received, by email. In accordance with School of Public Health policy, and due to legal, ethical, and privacy concerns, only your official U of M email address will be used for communication. I will send emails only to your official U of M email address, and only will accept emails from you through that account. It is the student's responsibility to regularly check this account.

Required Texts

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition. Washington DC: National Academies Press.

Macrina, F.L. (2005). Scientific Integrity, 3rd edition. Washington DC: ASM Press.

Additional readings will be assigned in addition to the textbook, as detailed in this syllabus. Links are included in this syllabus to access web-based materials. If a link does not work, enter the resource's information in a web search engine such as Google, and you are likely to find it. If this does not work, please contact the instructor. Readings are available at: https://umdrive.memphis.edu/kdward/public/PUBH8901.

Course Requirements and Grading Criteria

Grading is Satisfactory/Unsatisfactory. An overall grade of 83% is required to earn a grade of Satisfactory. Grading will be based on attendance, participation, various homework assignments, and in-class projects, as described below:

Class attendance & participation	25%
Reaction papers (total of 8)	15%
Manuscript review	15%
Oral presentation	15%
Writing sample: self-critique, revision, and peer critique	
Informed consent document: first draft, revision, and peer critique	10%
Attend/critique job talk	5%
Plagiarism quiz	5%

Class attendance & participation (25%): As a community of scholars, it is expected that the instructor and students will work together at all times to create an atmosphere that fosters shared discovery and mutual respect. The instructor will be prepared for each class meeting, and, likewise, students are expected to arrive prepared to ask questions, discuss, and learn. Attendance and active participation are essential to the success of a graduate seminar such as this. As such, students are expected to be present for all classes, arrive on time, stay for the entire class session, and participate actively. Because serious illness or competing demands may occasionally interfere with class attendance, a student may miss one class without penalty. The penalty for a second missed class is 10% of the total course grade. The penalty for a third missed class is an additional 10% of the course grade. A third missed class will make it impossible to achieve a Satisfactory course grade, and is therefore grounds for dismissal from the course.

In the event of an unavoidable absence, please notify the instructor beforehand, if at all possible. Several behaviors are disruptive and disrespectful to the instructor and other students and are not acceptable. These include tardiness, leaving early, use of electronic devices, and engaging in side conversations while others are talking. If arriving late or leaving early is unavoidable, notify the instructor in advance, if possible. Set your cell phone to silent if you must be available for an emergency. Students who engage in any of these disruptive behaviors may be asked to leave and not allowed to return until a meeting with the instructor has occurred during which a plan to avoid future problems has been worked out.

The following rubric will be used to grade classroom performance:

Criteria	Not Passing	"C" Level	"B" Level	"A" Level
considered				
in grading: Class attendance	Substantially late to or absent from class; no advance explanation provided. (Note: absence from class means no participation credit is earned for that session).	Arrives late to class at least occasionally.	Arrives on time, is seated and ready to begin at class start time.	Arrives on time, is seated and ready to begin at class start time, immediately ceases other activities at the time the class actually starts.
Attention	Noticeably off-task during a portion of the class and/or distractive to others. Examples include, but are not limited to, attending to non-class matters (checking e-mails, PDAs and/or using a laptop for any task not directly relevant to what's going on in the class at the moment), cellphone/pager noise, off-topic conversations/passing notes/texts	Occasionally inattentive, such as engaging in side conversations or other off-task activities. Cellphone/pager noise is occasionally heard during class.	Generally attentive with most conversations focused on the in-class discussion. Rarely introduces peripheral noises or distractions (cellphones, pagers, and other devices).	Conversations are focused on the in-class discussion. No peripheral noises or distractions (cellphones, pagers, and other devices).
Participation	Does not ask/answer any questions; does not make comments (or relevant comments) during the session; or significantly derails the agenda of the class.	Does not contribute to class discussion, or participates but comments are off-topic and/or reflective of a lack of preparation (e.g. asking questions that the readings already clearly addressed).	Contributes at a good level (but without dominating); contributions add to (do not derail) the class discussion.	Contributions augment / add to comments from peers; synthesizes / incorporates readings and assignments into the class discussion.
Professional demeanor	Professionalism is lacking in one or more major ways (e.g. uses derogatory and/or other highly unprofessional language).	Professionalism is lacking in one or more minor ways (e.g. use of slang and/or marginally disrespectful or arrogant language).	Class participation reflects a good level of professionalism.	Class participation reflects a noticeably high level of professionalism.

Reaction papers (15%): Students will submit 8 reaction papers (during Sessions 4-11) based on assigned readings. Papers submitted late (after the start of class) do not receive credit. These papers will be responses to case studies presented in the textbooks or from other readings. Their purpose is to help the student think about and critically evaluate the readings related to responsible conduct in research and public health ethics. The papers also serve as a mechanism to help students improve their writing skills and the instructor will provide feedback on both content and writing style.

Papers should be 1-2 pages, single-spaced, one inch margins all around, 11 point font. Student's name and submission date should appear at the top, in the header. Be sure to pay attention to the overall organization

and paragraph structure of your essay. Usually, a well-organized essay will begin with an introductory paragraph, continue with at least three body paragraphs, and end with a concluding paragraph. There should be clear structure within each paragraph (i.e. thesis statement first, followed by supporting information, then concluding statement and/or a segue into the next paragraph). Grading is based on both content and quality of writing, so be sure to check over your sentence structure, grammar, punctuation, and spelling.

A checkmark system will be used to grade the reaction papers (\checkmark +, \checkmark , or \checkmark -). In calculating the grade, a \checkmark -corresponds to a number grade of 75%, a \checkmark corresponds to a grade of 85%, and a \checkmark + to a grade of 95%. The following rubric explains how grades will be assigned:

Not Passing	√-	✓	√ +
Reaction paper is not submitted or is submitted late.	Reaction paper is submitted on time, but is substantially shorter than 1-2 single-spaced pages or has major deficits in either conceptualization (e.g., readings do not appear to have been used or adequately understood) or organization (e.g., poor paragraph structure or segues between paragraphs).	Reaction paper is of adequate length, is responsive to the questions, makes adequate use of the assigned readings, and has no major organizational problems.	Reaction paper is of adequate length, is well organized (at a level expected of doctoral level professionals), is responsive to the discussion questions, and goes beyond normal expectations for a beginning doctoral student in terms of quality of critical analysis of relevant issues and use of readings.

Manuscript review (15%): Each student will serve as the co-reviewer (along with the instructor or advisor) of a manuscript that has been submitted to a scientific journal for publication. He/she will be responsible for leading the class in a discussion of the merits and limitations of the article, drafting the review, revising the review based on feedback received from the class, and submitting the final review to the journal. Note that the instructor and the student's advisor will be responsible for ensuring the scientific quality of all reviews and must give final approval before reviews are submitted to journals.

Students will be responsible for reading and critiquing, during class exercises, all manuscripts being reviewed. The instructor will try, as much as possible, to schedule manuscript reviews evenly throughout the semester (approximately one paper per week). However, because we will be dependent on when manuscripts become available for review from various journals, students need to be prepared for a variable workload: it is likely that there will be no manuscripts to review some weeks, and multiple manuscripts on other weeks.

Oral presentation (15%): Each student will deliver an oral scientific presentation. The presentation will be based on the student's own research. The student will have 15 minutes to present content followed by 5 minutes for questions. Expectations will be discussed in class. Students also will submit checklist evaluations of other students' presentations, and provide oral feedback during class. Presentations will take place during sessions 5-9.

Writing sample: self-critique, revision, and peer critique (10%): Students will submit a brief sample of their scientific writing (approximately 1-2 pages). Examples of appropriate samples include an abstract written for a manuscript or conference presentation, the Specific Aims of a grant proposal, or the Introduction or Conclusion of a research paper submitted for class. Along with the writing sample, students will submit a

short analysis (1-2 paragraphs: no more than one single-spaced page) of the aspects of their writing that they would like to improve. The writing sample will be critiqued by both the instructor and a fellow student.

Informed consent document (10%): Students will submit initial and revised drafts of an informed consent document. The document should be related to a planned or potential research project of the student's and should be created on the University of Memphis's consent document template, available at http://www.memphis.edu/irb/forms.php. Students also will provide written feedback on a fellow student's initial draft.

Attend and critique a job talk (5%): Students are responsible for attending one job talk of a faculty candidate in the School of Public Health during the Spring semester, submitting a critique of the talk, and leading a class discussion about the talk. Students may attend a job talk in another department or institution with prior approval of the instructor.

Plagiarism quiz (5%): After completing the assigned readings for Session 3, students will complete an on-line quiz of issues in plagiarism. The quiz is available at http://www.academicintegrity.uoguelph.ca/plagiarism_quiz.cfm. For each of the 10 items, students should select a response until the correct answer is revealed. Quiz results should be printed and a hard copy submitted at the start of Session 3.

Promoting a Positive Learning Environment

The School of Public Health recognizes its responsibility to promote a safe and diversity-sensitive learning environment that respects the rights, dignity, and well-being of all students, faculty, and staff. Diversity means the fair representation of all groups of individuals, the inclusion of contrasting perspectives and voices, together with the appreciation and valuing of different cultural and socioeconomic group practices. Moreover, we aspire to foster a climate of mutual respect and empathy, among and between students, faculty, and staff, by nurturing an atmosphere that is free from discrimination, harassment, exploitation, or intimidation. Courses will strive to provide an opportunity for all students to openly discuss issues of diversity including, but not limited to, age, disability, ethnicity, gender, race, religious beliefs, and sexual orientation.

Writing Standards

Effective managers, leaders, and teachers are also effective communicators. Written communication is an important element of the communication process. The School of Public Health graduate program recognizes and expects exemplary writing to be the norm for course work.

Academic Conduct

All written work submitted must be the student's original work and conform to the guidelines of the *American Medical Association (AMA)* or *American Psychological Association (APA)* which are available online and via their publications. This means that any substantive ideas, phrases, sentences, and/or graphic images, from other people's published or unpublished work, must be properly referenced to avoid even the appearance of plagiarism. Plagiarism includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full or clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency in the selling of term papers or other academic materials. It is the student's responsibility to know all relevant university policies concerning plagiarism. Plagiarism is a serious violation of the professional standards of public health. Any documented case of plagiarism in this course will result in dismissal from the course with a failing grade, and may result in other more serious sanctions by the School of Public Health and The University of Memphis.

Cheating also is not unacceptable at The University of Memphis. Cheating includes but is not limited to the following: using any unauthorized assistance in taking quizzes or tests; acquiring tests or other academic material before such material is revealed or distributed by the instructor; failing to abide by the instructions of the proctor concerning test taking procedures; influencing, or attempting to influence, any university employee in order to affect a student's grade or evaluations; any forgery, alteration, unauthorized possession, or misuse of University documents.

Awarding an Incomplete Grade

A grade of "I" (Incomplete) may be assigned by the Instructor of any course in which the student is unable to complete the work due to EXTRAORDINARY events beyond the individual's control. The "I" may not be used to extend the term for students who complete the course with an unsatisfactory grade. Unless the student completes the requirements for removal of the "I" within 90 days from the end of the semester or Summer term in which it was received, the "I" will be changed to an "F," regardless of whether or not the student is enrolled.

Withdrawal Policy

The School of Public Health adheres to Graduate School policies and procedures regarding withdrawal from courses. Consult the Graduate School Dates & Deadlines Calendar for specific information. A late withdrawal is withdrawal from a course after the final date to drop classes, which falls around the middle of each semester. The drop is called a retroactive withdrawal if it takes place after grades have been issued. Before the drop deadline, students can process a drop on the web or over the phone without seeking anyone else's approval. The instructor, however, will appreciate the courtesy of being notified if you decide to drop the course. After the final drop date, the student must obtain approval for late drops or retroactive withdrawal from the Director of Graduate Studies of the School of Public Health. Instructors are not authorized to approve late drops or retroactive withdrawals.

Americans with Disabilities Act

The University of Memphis does not discriminate on the basis of disability in the recruitment and admission of students, the recruitment and employment of faculty and staff, and the operation of any of its programs and activities, as specified by federal laws and regulations. The student has the responsibility of informing the course instructor (at the beginning of the course) of any disabling condition, which will require modification to avoid discrimination. Faculty are required to provide "reasonable accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

Special Needs

Any student who has special needs for assistance and/or accommodation, and who is registered with the Office of Student Disability Services should meet with the instructor during the first week of classes.

Inclement Weather Policy

In the event that inclement weather requires the cancellation of classes at the University of Memphis, local radio and television media will be notified. Additionally, the University of Memphis has established an inclement weather hotline 901-678-0888. Emergency closing information is available at http://www.memphis.edu/cris/pdfs/closing.pdf.

Schedule of Topics and Assignments

Session 1 -- January 27 - Course overview

- Review of basic scientific writing skills

Readings To Set The Stage For The Class – The Role Of Science In Society:

Casadevall, A. (2012). Reforming science: methodological and cultural reforms (editorial). <u>Infection and Immunity</u>, 80, 891-896.

Pinker, S. (2013, August 6). Science is not your enemy. <u>New Republic</u>. Retrieved January 12, 2014: http://www.newrepublic.com/article/114127/science-not-enemy-humanities.

Reading On Scientific Writing Skills:

Bem, D.J. (2002). Writing the empirical journal article. In Darley, J. M., Zanna, M. P., & Roediger III, H. L. (Eds). The Compleat Academic: A Career Guide. Washington, DC: American Psychological Association.

→ In-class activity: Viewing of video "The Sense of Style: Scientific Communication for the 21st Century" by Dr. Steven Pinker, Harvard University. Retrieved January 14, 2014 from http://video.mit.edu/watch/communicating-science-and-technology-in-the-21st-century-steven-pinker-12644/.

Session 2 – February 3 - Delivering effective oral presentations - Advancing public health science: participating in the peer review process

Readings On Oral Presentations:

Female Science Professor. (2013, July 8). Talking the talk. <u>The Chronicle of Higher Education</u>. Retrieved January 12, 2014 from: http://chronicle.com/article/Talking-the-Talk/140111/.

Shapiro, D. (2012, July 16). Grim job talks are a buzz kill. <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/Grim-Job-Talks-Are-a-Buzz-Kill/132843/.

Shewchuk, J. (n.d.) Giving an academic talk. Retrieved January 12, 2014 from http://www.cs.berkeley.edu/~jrs/speaking.html.

Readings On Peer Review:

Bohannon, J. (2013, October 3). Who's afraid of peer review? Science, 342, 60-65.

Lovejoy, T.I., Revenson, T.A., & France, C.R. (2011). Reviewing manuscripts for peer-review journals: a primer for novice and seasoned reviewers. Annals of Behavioral Medicine, 42, 1-13.

Macrina, F.L. (2005). Authorship and peer review (chapter 4). In F.L. Macrina (Ed.), <u>Scientific Integrity</u>, <u>3rd</u> edition, (pp. 73-78 on peer review). Washington DC: ASM Press.

Assignment due by start of class:

Select a brief sample of your scientific writing that is 1-2 pages long. Examples of appropriate samples include an abstract you've written for a manuscript or conference presentation, the Specific Aims of a grant proposal, or the Introduction or Conclusion of a research paper submitted for class. Submit the sample to the instructor at kdward@memphis.edu by the start of class, and include with it a short analysis (1-2 paragraphs: no more than one single-spaced page) of aspects of your writing that you would like to improve. (Both the instructor and a fellow student will edit the sample).

→ In-class activity: Viewing of video "Designing effective scientific presentations: using PowerPoint and structuring your talk" by Dr. Susan McConnell, Stanford University. Retrieved January 14, 2014 from http://www.youtube.com/watch?v=Hp7ld3Yb9XQ.

→ In-class activity: Job talk critiques (as needed)

Session 3 – February 10	 Guest presentation by Professor Betsy Park, University Libraries: "Information literacy: conducting literature reviews, using the library, using citation software (RefWorks) and scientific databases, and avoiding plagiarism"
	(class will meet tonight in the McWherter Library, room 225)

Readings On Plagiarism:

Reis, R. (2012, May 14). Literal and intelligent plagiarism: students beware! <u>Tomorrows-professor-digest,</u> 64, Issue 5.

Masic, I. (2012). Plagiarism in scientific publishing. Acta Inform Med, 20, 208-213.

Price, A. (2006). Cases of plagiarism handled by the United States Office of Research Integrity 1992-2005. Plagiary: Cross- Disciplinary Studies in Plagiarism, Fabrication, and Falsification, 46-56. Retrieved January 14, 2014 from http://quod.lib.umich.edu/p/plag/5240451.0001.001/--cases-of-plagiarism-handled?rgn=main;view=fulltext

The Writing Center, University of Wisconsin, Madison (2003, March 4). Acknowledging, Paraphrasing, and Quoting Sources.

Assignment due by start of class:

After doing the readings on plagiarism, go to the website

http://www.academicintegrity.uoguelph.ca/plagiarism_quiz.cfm and complete the quiz "Test Your Understanding of Plagiarism." For each of the 10 items, select a response until you identify the correct answer. When you have completed the quiz, print the results and submit at the start of class.

Assignment due by start of class:

Submit your edits to a classmate's scientific writing sample (to be assigned by instructor). Please bring a copy for everyone in the class, and make your edits and comments with "track changes." Please also e-mail your edits to kdward@memphis.edu by the start of class.

- → In-class activity: Review of edited writing samples
- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)

Session 4 – February 17	 Protecting human research subjects Crafting IRB applications and consent documents
	- Guest presenter: Ms. Beverly Jacobik, IRB Administrator, Research Support Services, University of Memphis

Readings On Protecting Human Research Subjects:

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Introduction to the responsible conduct of research. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 1-3). Washington DC: National Academies Press.

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Human subjects and animal subjects in research. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 24-27). Washington DC: National Academies Press.

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979, April 18). The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research.

Swerdlow, P.S. (2005). Use of humans in biomedical experimentation (Chapter 5). In F.L. Macrina (Ed.), Scientific Integrity, 3rd edition, (pp. 91-126). Washington DC: ASM Press.

U.S. Department of Health and Human Services (n.d.). The Nuremberg Code. Office of Human Research Protections. Retrieved January 15, 2014 from http://www.hhs.gov/ohrp/archive/nurcode.html

To be assigned: manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper

Select one: On Being a Scientist, p. 25 (Tests on students), On Being a Scientist, p. 26 (A change of proposal), or Macrina case studies 5.1 – 5.10 (pp. 114-119). Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Review IRB application and consent document examples
- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)

Session 5 – February 24	- Writing and publishing the scientific research paper
	- Critically evaluating the scientific literature (guest presentation by Dr. Vikki
	Nolan)

Readings On Writing and Publishing the Scientific Research Paper:

APA Science Student Council. (2006). A graduate student's guide to determining authorship credit and authorship order. *American Psychological Association*. Retrieved January 14, 2014 from http://www.apa.org/science/leadership/students/authorship-paper.pdf.

Collins, L.S. (n.d.). How to read a scientific article. Retrieved January 14, 2014 from http://www2.fiu.edu/~collinsl/Article%20reading%20tips.htm.

Glass, R.L. (2000). A letter from the frustrated author of a journal paper. <u>The Journal of Systems and Software, 54</u>, 1.

Journal of the American Medical Association (n.d). JAMA authorship responsibility, conflicts of interest and funding, and copyright transfer/publishing agreement. Retrieved January 14, 2014 from http://jama.jamanetwork.com/data/ifora-forms/jama/auinst_crit.pdf.

Macrina, F.L. (2005). Authorship and peer review (chapter 4). In F.L. Macrina (Ed.), <u>Scientific Integrity</u>, <u>3rd</u> edition, (pp. 61-73). Washington DC: ASM Press.

Monblat, G. (2011, August 29). "Academic publishers make Murdoch look like a socialist." The Guardian. Retrieved January 14, 2014 from http://www.guardian.co.uk/commentisfree/2011/aug/29/academic-publishers-murdoch-socialist.

To be assigned: Manuscript to be used as in-class case study for Dr. Nolan's presentation

To be assigned: Manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper:

Select one: On Being a Scientist, p. 18 (Who should get credit for the discovery of pulsars), On Being a Scientist, p. 32 (Publication practices), On Being a Scientist, p. 36 (Who gets credit?), or Macrina case studies 4.1 – 4.10 (pp. 84-89). Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: discussion of case study assigned for Dr. Nolan's presentation
- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)
- → In-class activity: Oral presentations (Part 1)

Session 6 – March 3	- Surviving graduate school, Part 1: Time Management
	 Moral reasoning and public health ethics (guest presentation by Janet Shipman, J.D., Assistant County Attorney, Shelby County Health Department)

Readings On Time Management:

Johnson, S.R. (2010). "'Code O': How to recover from *Overwhelm*." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "The basics of organizing your work and time." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Priorities: how to decide what to do, and when." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Execution: getting your work *done*." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Getting e-mail under control." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Becoming a productive academic writer." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "A plan for professional reading." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Time mapping: learning to 'tell time." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Interruptions." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Johnson, S.R. (2010). "Getting more done through others: the basics of delegation." Thriving Amidst Chaos blog. Retrieved January 14, 2014 from http://www.thrivingamidstchaos.com/articles.html.

Readings On Moral Reasoning and Public Health Ethics:

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). The researcher in society. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 48-49). Washington DC: National Academies Press.

Fuchs, B.A., & Macrina, F.L. (2005). Ethics and the scientist (chapter 2). In F.L. Macrina (Ed.), <u>Scientific Integrity</u>, <u>3rd edition</u>, (pp. 19-37). Washington DC: ASM Press.

Kass, N.E. (2001). An ethics framework for public health. <u>American Journal of Public Health, 91</u>, 1776-1782.

Public Health Leadership Society. (2002). Principles of the ethical practice of public health. Retrieved January 14, 2014 from http://www.apha.org/NR/rdonlyres/1CED3CEA-287E-4185-9CBD-BD405FC60856/0/ethicsbrochure.pdf.

To be assigned: Manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper

Macrina case study 2.1 (p. 32), or 2.4 (p. 33). Please e-mail your paper to kdward@memphis.edu by the start of class.

Assignment due by start of class:

First draft of informed consent document. Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)
- → In-class activity: Oral presentations (Part 2)

March 10	- No class: Spring Break
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Session 7 – March 17	- Creating effective poster presentations
	- Sharing research results, and ownership of data

Readings For Poster Presentation Discussion

Block, S.M. (1996). Do's and don'ts of poster presentation. <u>Biophysical Journal, 71</u>, 3527-3529. Erren, T.C., & Bourne, P.E. (2007). Ten simple rules for a good poster presentation. <u>PLOS Computational Biology, 3</u>, 0777-0778.

Hess, G., Tosney, K., & Liegel, L. (n.d.). Creating effective poster presentations: resources. Retrieved January 14, 2014 from http://www.ncsu.edu/project/posters/. (Please read this page and peruse some of the links).

Readings On Sharing Research Results and Ownership of Data:

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Sharing of research results. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 29-34). Washington DC: National Academies Press.

Mays, T.D. (2005). Ownership of data and intellectual property (chapter 9). In F.L. Macrina (Ed.), <u>Scientific</u> Integrity, 3rd edition, (pp. 211-245). Washington DC: ASM Press.

To be assigned: Manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper:

Select one: Macrina case studies 9.1-9.10 (pp. 237-241). Please e-mail your paper to kdward@memphis.edu by the start of class.

Assignment due by start of class:

Peer critique of informed consent document. Please e-mail your paper to kdward@memphis.edu by the start of class.

→ In-class activity: Viewing of 3 short videos: "Effective poster presentations: an introduction," "Headings," and "Giving an effective poster presentation." Retrieved January 14, 2014 from http://www.ncsu.edu/project/posters/Videos.html

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)
- → In-class activity: Oral presentations (Part 3)
- → In-class activity: Critique of posters

Session 8 – March 24	- Surviving graduate school, Part 2: developing effective mentor/mentee
	relationships, networking, preparing for comps/dissertation
	- Guest presenters: TBA, Roundtable of senior doctoral students

Readings On Surviving Graduate School:

"14 lessons from Benjamin Franklin about getting what you want in life." (2012, April 14). Dumb Little Man blog. Retrieved January 14, 2014 from http://www.dumblittleman.com/2012/04/14-action-inducing-lessons-from.html.

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Advising and mentoring. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 5-7). Washington DC: National Academies Press.

Fidler, C. (2012, March 22). What I learned about surviving graduate school. <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/What-I-Learned-About-Surviving/131247/.

Kelsky, K. (2011, September 28). To: Professors; Re: Your Advisees. <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/To-Professors-Re-Your/129121/

Kelsky, K. (2012, March 27). Graduate school is a means to a job. <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/Graduate-School-Is-a-Means-to/131316/

Macrina, F.L. (2005). Mentoring (chapter 3). In F.L. Macrina (Ed.), <u>Scientific Integrity</u>, <u>3rd edition</u>, (pp. 39-60). Washington DC: ASM Press.

Schwartz, M.A. (2008). The importance of stupidity in scientific research. <u>Journal of Cell Science</u>, 121, 1771.

To Be Announced – Manuscript(s) for review

Vick, J.M., & Furlong, J.S. (2012, May 2). Seeking the mentors you need. <u>The Chronicle of Higher</u> Education. Retrieved January 14, 2014 from http://chronicle.com/article/article-content/131747/

To be assigned: Manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper:

Select one: Macrina case studies 3.1-3.10 (pp. 55-60). Please e-mail your paper to kdward@memphis.edu by the start of class.

Assignment due by start of class:

Revised informed consent document. Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Roundtable discussion with senior doctoral students
- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)
- → In-class activity: Oral presentations (Part 4)

Session 9 – March 31	- Identifying funding opportunities and strategizing how to get a grant (guest
	presentation by Dr. Wilfried Karmaus)
	- Scientific misconduct, fraud, and whistleblowing

Readings On Obtaining Funding:

"New and early stage investigator policies." (n.d.). National Institutes of Health. Retrieved January 14, 2014 from http://grants.nih.gov/grants/new_investigators/. (Please read this page and peruse some of the links).

"Funding opportunities and notices." (n.d.). National Institutes of Health. Retrieved January 14, 2014 from http://grants.nih.gov/grants/guide/. (Please read this page and peruse some of the links).

"Types of grant programs." (n.d.). National Institutes of Health. Retrieved January 14, 2014 from http://grants.nih.gov/grants/funding_program.htm. (Please read this page and peruse some of the links).

Readings On Scientific Misconduct, Fraud, and Whistleblowing:

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Research misconduct. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 15-18). Washington DC: National Academies Press.

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Responding to suspected violations of professional standards. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 19-23). Washington DC: National Academies Press.

Gunsalus, C.K. (2010). How to blow the whistle and still have a career afterwards. <u>Science and</u> Engineering Ethics, 4,

Macrina, F.L. (2005). Methods, manners, and the responsible conduct of research (chapter 1). In F.L. Macrina (Ed.), Scientific Integrity, 3rd edition, (pp. 1-18). Washington DC: ASM Press.

To be assigned: Manuscript(s) for peer review

Assignment due by start of class:

Case study reaction paper. Read: Bhattacharjee, Y. (2013, April 26). The mind of a con man. New York Times. Suggested reaction topics: What factors do you think led Diederik Stapel to commit fraud? Who was harmed and in what ways? What consequences did Stapel incur and were they just? What risks, if any, did his students face by reporting his misconduct? How do you think you would have handled this had you been his student? Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)
- → In-class activity: Oral presentations (Part 5)

Session 10 – April 7 - Teaching effectively (Guest Facilitators: Dr. Dan Gentry & Dr. Marian Levy)
- Conflicts of interest

Readings On Teaching:

Hall, B.P. (2012, May 14). "What really matters to working students." <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/What-Really-Matters-to-Working/131843/.

Hanford, E. (2012, January 1). "Physicists seek to lose the lecture as teaching tool." <u>National Public Radio.</u> Retrieved January 14, 2014 from http://www.npr.org/2012/01/01/144550920/physicists-seek-to-lose-the-lecture-as-teaching-tool?sc=fb&cc=fp.

Jenkins, R. (2012, July 30). "Day 1 of the semester." <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/Day-1-of-the-Semester/133167/.

Michaelsen, L.K., & Sweet, M. (2010). Fundamental principles and practices of team-based learning. In: Larry Michaelsen et al: <u>Team-Based Learning for Health Professions Education: A Guide to Using Small Groups for Improving Learning</u>. Sterling VA: Stylus Publishing, LLC.

Perlmutter, D.D. (2012, February 6). "Good deeds that are most punished, Part 1: teaching." <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/Good-Deeds-That-Are-Most/130649/.

Readings On Conflicts of Interest:

Committee on Science, Engineering, and Public Policy, National Academy of Science, National Academy of Engineering, and Institute of Medicine of the National Academies. (2009). Competing interests, commitments, and values. On Being a Scientist: A Guide to Responsible Conduct in Science, 3rd edition, (pp. 43-47). Washington DC: National Academies Press.

Bradley, S.G. (2005). Managing competing interests (chapter 7). In F.L. Macrina (Ed.), <u>Scientific Integrity</u>, 3rd edition, (pp. 159-185). Washington DC: ASM Press.

To be assigned: Manuscript(s) for peer review

Assignment due by start of class: Case study reaction paper:

Select one: On Being a Scientist, p. 45 (A conflict of commitment) or Macrina case studies 7.1-7.10 (pp. 181-184). Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)

Session 11 – April 14 - CV design (guest presenter Dr. Dmitri Stanchevichi, Dept of English) - Collaboration in science

Readings On Curriculum Vitae Preparation:

Eyler, J.R. (2012, April 4). The rhetoric of the CV. <u>The Chronicle of Higher Education</u>. Retrieved January 14, 2014 from http://chronicle.com/article/The-Rhetoric-of-the-CV/131404/.

Wecker, M. (2013, September 14). Common pitfalls to avoid in your CV. The Chronicle of Higher Education. Retrieved January 14, 2014 from https://chroniclevitae.com/news/3-common-pitfalls-to-avoid-in-your-cv.

Reading on Collaboration in Science:

Macrini, F.L. (2005). Collaborative research (chapter 8). In F.L. Macrina (Ed.), <u>Scientific Integrity, 3rd edition</u>, (pp. 159-185). Washington DC: ASM Press.

To be assigned: Manuscript(s) for peer review

Assignment due by start of class:

Bring a hard copy of your CV with you to class.

Assignment due by start of class: Case study reaction paper:

Select one: Macrina case studies 8.1 - 8.10 (pp. 204-208). Please e-mail your paper to kdward@memphis.edu by the start of class.

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)

Session 12 – April 21	- Preparing financially for your future (Guest facilitator: Ruth Lentz, First Vice
	President – Investments, Wells Fargo Advisors, LLC)

To be assigned: Readings On financial planning

To be assigned: Manuscript(s) for peer review

- → In-class activity: Manuscript critiques (as needed)
- → In-class activity: Job talk critiques (as needed)