

HOMPAL 6203 – ETHICS AND PROFESSIONAL PRACTICE

Course Instructor: Bernard Wood
Contact: 202-994-6077, bernardawood@gmail.com
Office: Suite 6000, SEH
Hours: By appointment

Fall 2020
Time: To be decided
Location: On line

COURSE DESCRIPTION: The Ethics and Professional Practice course focuses on A) the ethical dilemmas faced by all scientists, as well as ethical dilemmas that are more specific to researchers in topics related to human evolution, and B) on developing relevant professional skills. The latter include the ability to read manuscripts and papers critically and efficiently, time and project management, manuscript and grant writing and reviewing, effective oral and visual presentations, how to prepare for interviews, laboratory safety and the preparation of research plans and curriculum vitae. The course also covers topics regarding the duties of a faculty member, the academic career structure, what appointment committees are looking for when selecting candidates, non-academic career possibilities, and other aspects of the profession. Issues of diversity, inclusion and unequal opportunity permeate many of these topics, and will be considered within each relevant topic

In summary, these seminars are intended to help equip graduate students with the generic skills and attitudes needed to succeed as a professional in any context, but especially within the academy.

COURSE MECHANICS: We will cover a topic each week in an open format that allows the students to influence the agenda and the course of the discussions. Some topics include relevant readings and others will involve conducting critical reviews of professional materials (e.g., CVs, manuscripts, grant proposals). Readings will be made available on Blackboard (<https://blackboard.gwu.edu/>). Here is the link to an electronic copy of *On Being a Scientist* http://biblioteca.ucv.cl/site/colecciones/manuales_u/12192.pdf.

LEARNING OBJECTIVES:

Students who attend the course, and who contribute to course discussions, should be able to:

- (1) Understand what being a professional person means;
- (2) Understand the importance of respecting diverse backgrounds and experiences;
- (3) Be a responsible member of a research team;
- (4) Appreciate the principles and responsibilities of authorship (e.g., who, in what order, when to give credit to others) and the protocol for assigning authorship in different research areas;
- (5) Understand the role of the reviewer and referee, issues of conflict of interest and confidentiality;
- (6) Appreciate the importance of ethical practices and understand formal review processes for the study of human and animal subjects, endangered species, and excavations in foreign countries;
- (7) Comprehend data ‘ownership’ and sharing data;
- (6) Plan a career, academic or otherwise;
- (7) Understand the expectations for teaching, research and service in full-time academic positions in the US and abroad;
- (8) Appreciate how tenure works;

- (9) Present research results and major findings in a manner that is accessible to the public;
- (10) Understand the selection process for postdoctoral associates and entry-level academic positions;
- (11) Put together a job talk, a letter of interest, and prepare for the interview process;

EVALUATION:

The final course grade will be calculated based on Attendance and Class Participation.

CLASS POLICIES:

The course requires attendance. Late work will only be accepted if there is a valid (e.g., medical, religious) justification.

University policy on religious holidays:

1. Students should notify faculty during the first week of the semester of their intention to be absent from class on their day(s) of religious observance.
2. Faculty should extend to these students the courtesy of absence without penalty on such occasions, including permission to make up examinations.
3. Faculty who intend to observe a religious holiday should arrange at the beginning of the semester to reschedule missed classes or to make other provisions for their course-related activities

[NOTE: for other university policies on teaching, see <http://www.gwu.edu/~academic/teaching/main.htm>]

ACADEMIC INTEGRITY: I personally support the GW Code of Academic Integrity. It states: “Academic dishonesty is defined as cheating of any kind, including misrepresenting one’s own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” For the remainder of the code, see: (<http://www.gwu.edu/~ntegrity/code.html>).

SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM:

DISABILITY SUPPORT SERVICES (DSS)

Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: <http://gwired.gwu.edu/dss/>

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300

The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include:

- crisis and emergency mental health consultations
- confidential assessment, counseling services (individual and small group), and referrals

<http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

SECURITY

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.

SCHEDULE OF TOPICS & READINGS:

*Note, this schedule may change, subject to scheduling constraints and student interests.

Week #	Topic
1	Introduction to Ethics and Professional Skills.
2	Pathways to a successful career in academia and elsewhere
3	What to expect of advisors & mentors
4	What do professors do? How are they appointed and promoted?
5	The role of the peer reviewer: How are papers reviewed?
6	The role of the peer reviewer: How are grants reviewed?
7	A research plan for graduate school
8	Ethics in science: When and how to share data?
9	How to plan and write a paper? Who should, and who should not, be an author?
10	Where to submit a paper. How are journals ranked?
11	Participating in a research team
12	What makes a good CV?
13	Life after graduate school: Examples of career paths
	<i>Thanksgiving Break</i>
14	Life after graduate school: Examples of career paths

SCHEDULE OF TOPICS & READINGS:

*Note, this schedule may change, subject to scheduling constraints and student interests. Readings will be posted on Blackboard in advance.

Week 1: Introduction to Ethics and Professional Skills

Week 2: Pathways to a successful career in academia and elsewhere

Week 3: What to expect of advisors & mentors

What to expect from your advisor, and how to communicate with your advisor? What is your advisor's role in helping you 'network'?

Readings:

- Case Studies 1-2 in *On Being a Scientist*:
 - (p. 4): "Introduction to the Responsible Conduct of Research"
 - (p. 8): "Advising and Mentoring"
- Olson, G. 2008. "Emails are forever." *Chronicle of Higher Education*.

Week 4: What do professors do? How are they appointed and promoted?

What is the full range of duties of a professor in a university? How does tenure work?

Readings:

- GW guidelines for tenure dossier.

Week 5: The role of the peer reviewer: How are papers reviewed?

Ethics: What is the role of a referee/reviewer? Confidentiality, conflicts of interest.

Practice: How to read a paper? What is the 'question'? Separating data from opinion.

Exercise:

- Review a paper BW will provide.

Week 6: The role of the peer reviewer: How are grants reviewed?

Reviews and discussions of fellow classmates' NSF-GRFPs

Exercise:

- Peer reviews of fellow classmates' NSF-GRFPs.

Week 7: A research plan for graduate school

Doing side projects versus dissertation. How and when to establish collaborations. How to write a grant proposal.

- Discuss importance of asking an *interesting* question.

Exercise:

- Read the NSF guidelines for the GRF proposal
- Draft GRF proposal

Week 8: Ethics in science: when and how to share data

Who, if anyone, has the right to control access to data, be those data measurements, fossils, artifacts, etc.?

Readings:

- Case Studies in *On Being a Scientist*:
 - (p 29): "Sharing of Research Results"
- NSF policy on data sharing (<http://www.nsf.gov/bfa/dias/policy/dmp.jsp>) on 'Data Management', or AAPA Code of Ethics?
- Van Noorden, R. 2013. "Data Sharing" Everything on Display. *Nature* 500: 243-245.
- Case Studies in paleoanthropology:
 - Gibbons, Ann, 2002, Glasnost for fossils: seeking access to hominids. *Science* 297 (5586): 1464-1468
 - Wong, Kate. 2012. [Could a Renewed Push for Access to Fossil Data Finally Topple Paleoanthropology's Culture of Secrecy?](#) Scientific American.

Week 9: How to plan and write a paper? Who should, and who should not, be an author?

How do you produce a manuscript? Thinking/Planning/Organizing/Writing/Editing/Submitting
Ethics: Authorship, proper acknowledgement of collaborators and funding sources.

Responsibilities of an author: Who, and in what order? Giving credit where credit is due.

Readings:

- Case Studies in *On Being a Scientist*:
 - (p. 35): "Authorship and the Allocation of Credit"
 - (p. 39): "Intellectual Property"
- Cozzarelli N.R. 2004. Responsible authorship of papers in PNAS. *Proceedings of the National Academy of Sciences* 101:10495.

Week 10: Where to submit a paper? How are journals ranked?

How are journals ranked? Why is 'Impact Factor' used as a measure to rank journals?

How are researchers ranked?

Exercise:

- Find the 'Impact Factor' for 5 journals in your field.
- Find the 'H-Index' for 3 (?) scholars (junior, mid, and senior), and compare to colleagues.
 - What are alternatives to the 'H-Index'?
 - (In class, discuss strengths and weaknesses of H-Index)

Week 11: Organizing and leading a research team

The role of the lab leader. How to set up a lab, the responsibilities of a lab leader (e.g., safety, mentoring), and the ethics of research on human and animal subjects.

Readings:

- Case Studies in *On Being a Scientist*:
 - (p. 24): "Human Participants and Animals Subjects in Research"
 - (p. 28): "Laboratory Safety in Research"

Week 13: What makes a good CV?

Review CVs of faculty & classmates

Exercise:

- Reviews of CVs, with recommendations for improvements.

Week 14: Life after grad school - I

Why do a post-doc. How to choose the best place for a postdoc.

What factors are most important?

Alternative non-academic career paths.

Exercise:

- Find 5 current job ads, and weigh the strengths and weaknesses of each.

The selection process for postdoc & faculty positions (the university's perspective).

The 'job talk' and interview.

It begins now: performance in grant proposals, publications, & professional meetings.

Readings:

- Vick, Julie M, Jennifer S. Furlong, 2006. Asking the right questions: Practical guidance for academic job seekers from professional career counselors *Chronicle of Higher Education*, 1/11/2006
- Heiberger MM, JM Vick. 2002. Networking for Dummies. *Chronicle of Higher Education*, 5/17/2002
- Reis, Richard M. 2001. Giving a job talk in the sciences. *Chronicle of Higher Education*, 3/30/2001
- Vick, Julie Miller & Jennifer S. Furlong, 2005. Why didn't I get hired? *Chronicle of Higher Education* 5/22/2005

Exercise:

- Discuss how we as faculty 'short list' applicants for postdoc & faculty positions.