

PPWS Ethics Policy (DRAFT)

The Ethics Requirement will be introduced to students at the new-student orientation held at the beginning of every semester.

When a student's advisory committee discusses a student's plan of study, they will use the following form to indicate how the various topics will be addressed. NA (not applicable) may be used for some of the optional topics.

Required Topics:	Addressed by:
1. Plagiarism and other violations of the Graduate Honor Code	
2. Proper use of professional conventions in citation of existing research and scholarship, accurate reporting and ownership of findings, and acknowledgement of contributions to the work	
3. Ethical standards in teaching, mentoring, and professional activities	
4. Available avenues for reporting alleged misconduct	
Optional Topics:	
1. Appropriate lab procedures and maintenance of lab notebooks and other research documentation	
2. Fair use of publications, software, and equipment	
3. Appropriate research protocols involving human and animal subjects; Institutional Review Board and/or Institutional Animal Care and Use Committee certification	
4. Guidelines for maintenance of confidentiality (and, where relevant, anonymity) in research	
5. Guidelines for determination of authorship	
6. Appropriate grant and contract management, including appropriately asserting personal or program capacities and competencies when applying for grants and contracts	
7. Discipline- or field-specific professional ethics	

Separately, when PPWS students submit their research proposal (required by the end of their third semester of enrollment) they will be required to include an (often brief) section on ethical questions pertaining to the student's research. If there are no ethical concerns specific to the proposed research, a simple statement will suffice, for example "Neither student nor committee members could think of ethical concerns specific to this research, beyond those that apply to research in general."

Options for meeting some of the requirements

Recommended courses:

ALS 5324 - Research Ethics in Agriculture and Life Sciences

Principles of and skills development in research ethics to enhance professional preparation in agriculture and life sciences. Pre: Graduate standing.

Credit Hour(s): 1. (Fall)

Contact: Hannah Scherer

Covers all required topics, and optional topics #1 and #3

STS 5444 - Issues in Bioethics

Identification and analysis of ethical issues arising in basic and applied biological, medical, environmental, ecological, and energy studies.

Credit Hour(s): 3

Contact: Doris Zallen

Covers all the items on the Required list, as well as all the optional topics except for item 6.

Alternative options:

GRAD 5014 - Academic Integ & Plagiarism

Advanced investigation of academic integrity, responsible scholarly conduct, and methods of citation, especially as they relate to the Virginia Tech Graduate Honor System.

Theoretical and historical underpinnings of academic integrity. Discipline-based citation practices. Pre: Graduate standing.

Credit Hour(s): 1

Covers all required topics (#1 and 2 in greater depth), and optional topics #3, 4 and 5.

Online versions are offered.

Dr. Hannah Scherer's **online modules** being developed for OMALS – will cover the same material as ALS 5324, but will not carry course credit. An option for students who may have a conflict with the on-campus course, and who may be stationed at an AREC in other years.

Covering some aspects:

GRAD 5004 - GTA Training Workshop

A three-day orientation to the role of a GTA at Virginia Tech and review by experienced faculty and GTAs of essential guidelines for effective classroom and laboratory communication and management. Microteaching component completes the program. I

Covers required topics #3 and #4

CITI modules <https://www.citiprogram.org/> Responsible Conduct of Research
Biomedical Responsible Conduct of Research Course

Conflict of interest training

All departmental courses that include a requirement for writing one or more papers or grant proposals will address required topics #1 and #2. This includes:

- PPWS 5204, Principles of Plant Disease Management
- PPWS/BIOL 5304, Plant Stress Physiology
- PPWS 5454, Plant Disease Physiology and Development
- PPWS 5604G, Biological Invasions
- PPWS 5704, Weed Science and Management
- PPWS/HORT 5534, Advanced Plant Physiology & Metabolism II

Workshop: Margaret Merrill, Lee Daniels, Hannah Scherer and Joyce Latimer are developing a workshop for graduate students, “Scientific Writing – Synthesizing What You’re Reading,” to address the importance of scientific writing as a critical thinking skill. We will emphasize proper paraphrasing and the dangers of plagiarism. This workshop will be scheduled for the week before classes start in January 2015.