



SYLLABUS

ABE/ETMA 501: Graduate Research (1 hour)

Fall, 2025

Instructor: Yuanhui Zhang, Room 332B AESB, 333-2693, yzhang1@illinois.edu
TA: Room 308,

Meeting Time: 12:00-12:50 pm, Friday, Room 208, AESB

Objectives:

This course is for new graduate students in Agricultural and Biological Engineering and Technical Management Systems to guide your graduate program. By completing this course, you will be able to

1. Understand all requirements for the respected programs including courses, research and teaching; Follow the ABE Graduate Handbook
2. Develop a research plan for a thesis based on literature review, academic background and research need;
3. Improve effective oral/written presentation skills at professional settings, including an essay of literature review and writings session;
4. Acquire necessities of a graduate student including good laboratory practices and professional ethics.

Evaluation:

The final grade is based on the essay writing, oral presentation, team discussions and participation of the class. We expect you to attend every session throughout the semester, because many sessions will be offered by guest lectures and difficult to make up. Reasonable excuses for absent of a session are acceptable by the instructor approval. There is no final exam. There is no grade distribution curve to fit.

Schedule – Tentative

No	Date	Topics	Instructor(s)	Assignment
1	8/28	Department activities, grad student responsibilities; Structures and functions of UIUC units, Alpha Epsilon Soc. Fellowship opportunities, GSA President Introduction	<i>Envision at UIUC Graduate Handbook Procedures: Heather Crump GSA reps</i>	15 min 20 min 10 min
2	9/4	Lab Safety (Campus and ABE) training certificate https://drs.illinois.edu/Page/Programs/LaboratorySafetyTraining#LaboratorySafetyTrainingRequirements	<i>Ford, Latcher, invited DRES professional from UIUC safety board</i>	Panel Discussion
3	9/11	Information retrieval and Bibliography Development, Room 509, LIAC	<i>Mike Dickinson mad4@illinois.edu</i>	Start your literature review
4	9/18	Knowing the ABE department and programs	<i>Dr. Maghirang</i>	
5	9/25	Planning you graduate program (course work, experiment, literature review and writing: expectations	<i>Zhang</i>	Clarify expectations
6	10/2	ABE Research, Faculty presentations	<i>E2E Research</i>	
7	10/9	How to be successful as a graduate student, Discussion	<i>Graduate students & faculty-Roundtable</i>	
8	10/16	Literature review, citations; Software introduction; give the written assignment- Lit review essay	<i>Zihan Wang</i>	Lit review Assignment
9	10/23	How to write a scientific paper: Start from framewark	<i>Zhang</i>	Panel Discussion
10	10/30	Writing a paper contin'd: addressing 5Ws	<i>Zhang</i>	Discuss draft with your advisor
11	11/6	Story telling through data; graph visualization, tables and analysis	<i>Zihan Wang</i>	Demo and case-study
12	11/13	Team work – Visualization presentations and comments; <i>All class; Evaluation forms for all</i>	<i>Zihan Wang</i>	Two plots per group
13	11/20	How to publish a scientific paper: <i>citation, composing a theme/abstract, working on examples ,</i>	<i>Zhang</i>	Literature review, 80 character title discussion
	11/22 -11/30	Thanksgiving break	<i>No class</i>	
14	12/4	Final presentation: For all	<i>Literature report discussion, title determination,</i>	
	12/11	No lecture. No exam. Essy due.	<i>Lecture end 12/8</i>	Lit. Review essay Due