



Post-Harvest Engineering
and Education

GRADUATE STUDENT MENTORING PLAN

ABSTRACT

This graduate student mentoring plan is to be used as a contract between the graduate student researcher and faculty advisor. The plan will ensure research remains on track and the graduate student meets benchmarks for graduation.

Janie Moore

Texas A&M University
Biological and Agricultural Engineering

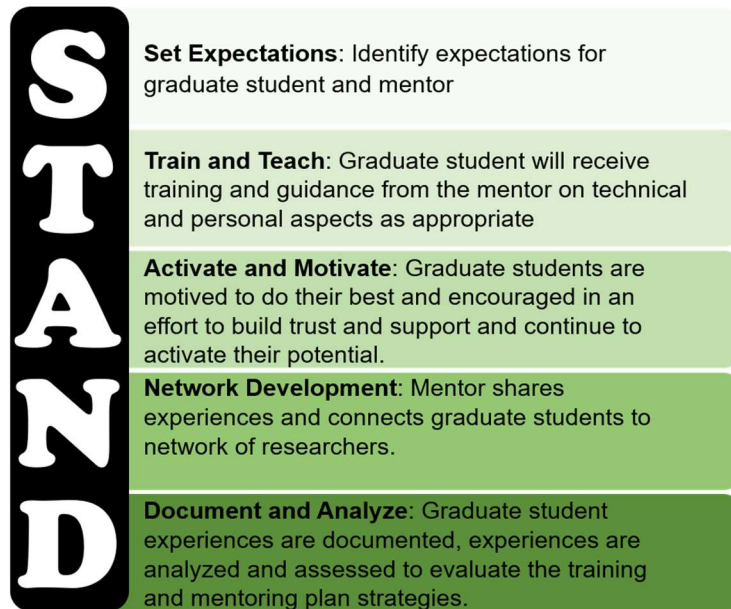
PHEED Team Graduate Mentoring Plan for Mentors & Mentees

The goals of the graduate mentoring template are to formalize a plan for the mentee and their mentor (faculty advisor) to develop the research and other necessary skills for a successful graduate career. The second goal of the mentoring template is to ensure the mentor has a guide that will allow them to help graduate researchers throughout their professional and research training as they transition into, and out of, graduate school. The plan was developed by Dr. Janie Moore, an Assistant Professor in the Biological and Agricultural Engineering Department at Texas A&M University, with guidance from the six core competencies for research fellows developed by the National Post-Doctoral Association. In addition to the six core competencies, Dr. Moore created a pathway strategy called S-T-A-N-D for mentors and mentees, that encompasses vital processes from the six core competencies. This strategy was developed for mentors to monitor the progression of graduate researchers in their prospective degree programs. This strategy outlines various steps, procedures, and practices that will keep the mentor accountable as they make sure the graduate researcher is held to the same standard.

National Post- Doctoral Association:

1. Discipline-specific conceptual knowledge
2. Research skill development
3. Communication skills
4. Professionalism
5. Leadership and management skills
6. Responsible conduct of research

S-T-A-N-D:



Once the form is completed, the template will be reviewed and updated annually by the advisor and or mentor (A plan for year two should be submitted towards the end of the graduate students second semester). Mentor and mentee will assess how well they have followed the Mentoring Plan and suggest how it might be altered to attain new or different goals.

Instructions

Mentees	Mentors
I. Generate an individualized development plan (IDP) which is below.	I. Send this document to incoming graduate students or put this document on individual research team websites (skip step II if this document was emailed to the incoming graduate student) .
II. Complete the form below, prior to your first one on one sessions with advisor, at least two weeks in advance .	II. If you put the document on the teams websites, communicate with the incoming graduate students, that the form is on there and must be completed prior to the one on one session.
III. Schedule one on one session with advisor to discuss the plan. Each one on one session, you should add additional information to this plan.	III. After and before the students submit the form, there are sections that need to be filled out by the mentor, prior to the one on one session with the mentee.

Added Details

- Tools for generating STEM fields IDPs can be found at: <http://myidp.sciencecareers.org/>
 - One on One sessions **should be scheduled, within the first month of the new** graduate students program start date.
 - Please refer to the graduate student handbook for additional questions: <https://baen.tamu.edu/academics/graduates/graduate-manual-final-1-8-2020-sk-3/>
 - Please refer to the individual team graduate handbook. The PHEED team student handbook can be found at: <https://pheed.tamu.edu/>
-

Section 1: Mentor Section - Identifying Mentee and Mentor Information

Who are you mentoring: [Student Name]

Primary Mentor/Advisor: [Advisor Name]

Research Focus Area(s):

Post-harvest treatment technologies, bioprocess engineering, biomass valorization, shelf-life preservation, mycotoxins, food safety, agricultural biosecurity, agricultural terrorism risk assessment, storage and packaging methods, design based research, innovative instructional strategies for teaching engineering.

Planned Date for Next Review/Revision of Template:

November 16, 2020

Mentoring Philosophy: Please describe your mentoring philosophy.

Management Style: Please describe your management practices.

Communication: Please describe your communication style and the strategies you use to maintain effective communication with.

Section 2: Mentee Section - Career Goals (2-3 sentences for each)

I. Overall Career Goal:

II. Next stage/job after graduation:

III. Additional career goals:

Section 3: Mentee/ Mentor Section – Proposed Research (this section should be completed prior to the first one on one session)

I. Proposed Research Project: Brief description of your potential planned research project (make sure the proposed project incorporates an aspect of your advisor's research).

II. Proposed Research Questions (at least 3):

III. Proposed Research Objectives (at least 3):

Mentor Section (to be completed after the form has been submitted) – **Questions & Comments**

Section 4: Mentor Section – Outlined Deadlines (this section should be completed prior to sending this form to the mentee)

Anticipated Presentations

Describe expectations about the number of times each year, and dates, if known, the graduate student will present at one-on-one sessions, lab or research group meetings, conferences, etc.

Anticipated Publications

Describe expectations about the number of manuscripts to be written during the first year of the funded period, if applicable in your discipline, specify if these are first-author publications with mentor as senior author, or collaborations with colleagues; outline potential target publications.

Timeline for Planned Grant or Awards Submissions

Outline planned mentored grant submissions during the funded period if applicable; these could include federal grants/fellowships, small professional society grants, foundation awards, etc.

Timeline for mentees development of a cohesive, articulable research identity (this potentially could be established in the first year, depending on how far the student gets into their research project).

Section 4: Mentor Section - Career Development

I. Professionalism

Briefly describe plans for how the mentor will provide instruction in professional practices to the mentee on a regular basis. This will likely include role modeling and open discussion of the importance of professionalism and ethical conduct through one-on-one and group meetings, laboratory safety, standards of professional practice.

II. Development of Mentorship and Leadership Skills

Briefly describe plans for how the mentor will aid in the mentees' development of these skills - expected to be an increasing focus as the training progresses.

III. Development of Communication, Time Management, and Related Skills

Briefly describe plans for how the mentor will aid in the mentees' development of these skills - expected to be an increasing focus as the training progresses.

Section 5: Mentor Section - Training in the Responsible Conduct of Research

Briefly describe plan for training in specific topic areas to include: 1) conflict of interest, 2) data acquisition and ownership, 3) responsible authorship, 4) researcher/trainee responsibilities.

Section 6: Mentor Section - Resources That Will Be Provided to Support Mentee

Briefly describe resources that will be provided by the primary mentor and/or Division to support mentee's attainment of the goals outlined in this plan

Section 7: Mentee Section - Mentee Checklist (1st year expectations and deliverables)

Section 7: Mentor Section - Mentor Checklist (1st year expectations and deliverables)

Section 7: Mentee Section - Mentee Checklist (Year ____ expectations and deliverables)

Section 7: Mentor Section - Mentor Checklist (Year ____ expectations and deliverables)