# Sample Framework for Developing Shared Expectations in PhD Advising and Mentoring<sup>1</sup>

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# Introduction

The topics covered in this sample framework provide a starting point for establishing a good advising and mentoring relationship between faculty advisors and PhD students engaged in research together. The framework is intended to be supplemental to the annual PhD progress report that students and faculty advisors submit at the end of each academic year. While not intended to serve as a comprehensive guide or an official "contract", this advising and mentoring framework may assist students and faculty advisors in facilitating discussions that aim to advance an effective working relationship.

The framework needs to be established when students start their PhD programs. By revisiting and updating shared expectations within the framework (at least annually), it can then be tailored to emphasize relevant and important topics in a timely way during the course of a student's time in the graduate program.

Prior to working on the advising and mentoring framework, the student mentee and faculty advisor are strongly encouraged to review the CEE Department's <a href="PhD Guidelines">PhD Guidelines</a><sup>2</sup> and the student's admission letter to ensure they both have a *complete and correct* understanding of the mutual commitments made at the time of enrollment.

Students and faculty are also encouraged to jointly sign up for a Mentoring Plan Workshop offered by Rackham's Faculty Committee on Mentoring (MORE) early on in a student's tenure in the program. Additional mentoring resources can be found at MORE's website.<sup>3</sup>

#### Framework

The following framework highlights critical times when specific framework categories are typically most relevant in a student's path through the PhD program. "Start" refers to those expectations that should be established at the very start of the student's PhD program and then revisited annually. Sample questions, topics, or key points to address are provided within each category to guide the discussions.

# Start

(Expectations that should be established at the very start of the student's PhD program and then revisited annually.)

# 1. Communication and meetings.

- What is the best way/technology for the advisor and the student to communicate?
- What pronouns should be used in meetings and communication?
- What is an appropriate time frame to expect responses?
- How frequently will meetings be held? Is an agenda required? If so, who sets the agenda? How long will the meetings be? Who should be included in meetings?

<sup>&</sup>lt;sup>1</sup> Last updated on April 9, 2021. This sample framework was developed based on a template provided by Rackham's Faculty Committee on Mentoring (MORE).

<sup>&</sup>lt;sup>2</sup> https://cee.engin.umich.edu/wp-content/uploads/sites/9/2020/11/PhD-Guidelines\_V5\_Nov2020.pdf

<sup>&</sup>lt;sup>3</sup> https://rackham.umich.edu/faculty-and-staff/resources-for-directors/mentoring/

• What, if any, are obstacles that would prevent the advisor or student from meeting or responding in an appropriate time frame?

# 2. Student's role in research project(s).

- Describe the student's primary area(s) of responsibility as a researcher (e.g., reading peer-reviewed literature, setting short- vs long-term goals, taking initiatives, leading various research activities, mentoring and training other team members, registering for safety training, etc.).
- Discuss the flexibility for the student for finding their dissertation topic, and make clear the relationship between the student's dissertation research and any other project(s) they may be involved in.

# 3. Funding.

- Note that the College of Engineering operates under a fully-funded model for all admitted PhD students. In general, students admitted with a bachelor's degree receive five years of full funding, while students admitted with a master's degree receive four years of full funding. This funding commitment is guaranteed, provided the student makes acceptable research progress and fulfills program requirements, as stipulated by their individual faculty advisor and the graduate program.
- Discuss plans for future funding (e.g., internal and external fellowship opportunities, GSI opportunities).
- While the advisor bears responsibility for funding the student, discuss expectations of the student for serving as a GSI, assisting with proposal writing, and pursuing fellowships/scholarships to ensure the student has a complete understanding of their responsibility in assisting with funding.

# 4. Student ownership of research responsibilities.

- Discuss expectations on the level of the student's effort, working philosophy, scheduling of work, and deadlines for completing work. An important point to communicate to the student is that their status is not that of an employee but rather as a student with a stipend, and thus the student's effort should be calibrated to meet weekly and annual levels of research productivity.
- The advising process for students struggling to meet the set expectations should be discussed.

# 5. Time away from campus.

- Discuss expectations for time away from campus and how best to plan for it.
- What is the time frame for notifying of an anticipated absence?
- Describe how emergency situations requiring time away might be handled.

#### 6. Participation in group meetings and seminars.

• Discuss whether the student will participate in ongoing research group meetings and program or department seminars. What does this participation entail?

#### 7. Opportunities for feedback.

- In what form and how often will the student receive feedback on their overall progress, research activities, etc.? Set expectations on how much time will be needed for providing or responding to feedback on written work, such as paper drafts.
- Discuss opportunities for the student to provide the advisor with feedback and how conflicts between the advisor and advisee or group members might be addressed.

# 8. Anticipated time of completion of programmatic milestones and other milestones (as applicable).

• Discuss typical time frames for graduation for PhD students in the research group, and determine major milestones for achieving it.

<b>Academic Milestones</b>	Year 1			Year 2			Year 3			Year 4	Year 5	Additional
	F	W	S/S	F	W	S/S	F	W	S/S			
Milestones:												
Preliminary Exam (Written)				X	X							
Complete Classes							X	X				
Dissertation Proposal Exam									X			
Dissert. Comm. Mtg.										X		
Dissertation Defense											X	
Other Milestones:												

Place an X in terms designated for milestones. F=Fall, W=Winter, S/S = Spring/Summer. Other milestones might include: conference presentation, peer-review publication, etc.

# 9. Professional goals.

- The student should identify their short-term and long-term goals.
- The advisor should discuss any steps/resources/training necessary and ways they can help the student accomplish their goals. This could also include brainstorming other mentors in the department or at other universities and occupations that would be assets for mentorship and career advising.
- Discuss course load norms in the group and how a student selects their courses.
- Discuss dual-degree opportunities, minors, certificates, etc. and what it means to pursue them (e.g., extra time to graduation, extra courses, etc.).

#### 10. Other areas.

- Discuss other expectations in the working relationship between the student and the advisor during the student's tenure in the program and any potential obstacles and how to address them.
- Discuss how expectations (and funding) can look different in the summer compared to the academic year.
- In the case of co-advising, discuss how advisors' expectations can be similar or different. Discuss expected communication among the advisee and co-advisors.

#### Year 2 or Later

# 11. Skill development.

- Identify the development of skills and abilities for the student to focus on during the upcoming year. These could be academic, research, or professional skills, as well as additional training experiences such as workshops or internships.
- Revise or redefine previous goals to address new interests and new opportunities that the student may want to pursue.

# 12. Mentoring other students.

• Discuss expectations of the student on mentoring other students, e.g., a new PhD student/undergrad/Master's student.

# 13. Papers and authorship.

- Discuss the paper publication process and identify a few target journals.
- Discuss disciplinary norms around authorship and how authorship decisions are typically made in the research group.
- Describe expectations around how decisions will be made about when research work is ready for publication.
- Discuss a goal number of publications for graduation, if any.

# 14. Attending professional conferences and symposia.

- How often will the student be expected to attend a professional conference or symposium (e.g., annually)?
- What funding is available to attend these events? What role should the student play in securing funds to attend conferences (e.g., applying for Rackham's travel grants)?
- Discuss the activities of the student at conferences/symposia and the expectations upon return from attending.

# Year 3 or Later

15. Anticipated dates of defense and graduation.