

Duke Physics Mentoring Expectations for Faculty Advisors and PhD Students

This document summarizes mentoring expectations and best practices for both faculty advisors and PhD students in the Department of Physics at Duke University.

Expectations for Faculty Advisors:

Research:

The faculty advisor provides mentorship in scholarly research. This responsibility includes helping to identify an appropriate and workable research project, helping to set reasonable research objectives and goals, and working with the student to create a timeline for research completion. The advisor should encourage effective use of time spent on research activities. This responsibility also includes helping to build the PhD student's individual professional background in support of their individual professional aspirations. The advisor should also encourage their advisees to reach out, when appropriate, to additional co-advisors or informal research mentors.

- **The faculty advisor is expected to participate in ongoing and regular meetings with their students to discuss research progress.** The advisor and student should agree on an expected frequency of one-on-one meetings (virtual or in person) and use these meetings to review progress, brainstorm ideas, troubleshoot challenges, and outline next steps. The frequency of these meetings should be at least monthly.
- **The faculty advisor should periodically clarify the student's funding package including any ancillary work such as teaching expectations associated with the package.**
- **The faculty advisor should endeavor to create a research environment that fosters independent, scholarly research, and professional growth.**
- **The faculty advisor is expected to work to resolve problems in the student-advisor relationship when they arise.** It can happen that the mentoring relationship between advisor and student does not function properly. In such cases, departmental policy is as follows: 1) Both advisors and students should know that it is acceptable for students to raise concerns with the advisor and vice versa. Such discussions should be respectful and constructive and focused on how to address concerns going forward. 2) If, after such discussions, the student or advisor believes that such concerns have not been fully addressed, either should consult with members of the Dissertation Committee (when there is one) to help identify solutions. 3) If concerns still remain, the student or advisor should approach the DGS to help identify additional solutions; alternatively, they may approach the Chair or Associate Chair. It is also possible for students to bypass discussions with the advisor and/or dissertation committee and talk directly with the

DGS, Chair, or Associate Chair. 4) If problems cannot be resolved after meaningful efforts by both the student and advisor, either student or advisor may decide to end the advisor-advisee relationship. In such cases, and provided the student is in good-standing, the student may consider a change of advisor (see below).

Academic Preparation and Progress:

- **The faculty advisor is expected to participate in an annual meeting with the student to discuss academic progress and next steps in the PhD program.** This responsibility includes helping to ensure that the Annual Report summarizing these discussions is completed and submitted in accordance with program requirements. These annual meetings should also include a component through which Dissertation Committee members may provide feedback and suggestions.
- **The faculty advisor is expected to monitor progress towards the PhD.** The advisor should meet regularly with the PhD student to hear updates on progress, results, and challenges in research and other activities. Advisors should provide feedback on student documents (e.g., dissertation drafts) within 14 days.

Professional development:

- **The faculty advisor is expected to discuss career development with the PhD student.** PhD advisors should be aware of and assist in identifying resources to further the student's professional goals keeping in mind the range of career options both inside and outside of academia.
- **The faculty advisor should allow time outside of research for student engagement in professional development activities.** These include, for example, skill building workshops, professional conferences, additional research collaborations, or other informational sessions.
- **The faculty advisor should consider nominating the student for relevant professional opportunities and try to connect their advisees to relevant professional contacts and networks.**
- **Faculty advisors should submit letters of recommendation on time, especially when requested at least 30 days in advance. Students should be informed when letters are submitted.**

Respectful engagement and well-being:

- **The faculty advisor should commit to being available to meet with the PhD student.** The advisor and the student should agree on expected frequency of and preparation for meetings and expected timeframe for responding to emails and for providing feedback on work products. Under normal circumstances, faculty advisors are expected to respond to student inquiries (e.g., email, meeting requests, ...) within 7

days when the advisor is on campus, and within 14 days if away. The PhD advisor should reach out to PhD students who are not making contact.

- **The faculty advisor should communicate with the student in a constructive and respectful manner, including situations where there are concerns that the student is not meeting expectations outlined in this document.** This responsibility includes using concrete and specific language when providing suggestions for improvement or critiquing work.
- **The faculty advisor has a responsibility to take an interest in the student's well-being, to listen to any concerns, and to connect the student, as appropriate, with additional resources such as Duke Reach.**

Policies:

- **The faculty advisor is expected to become familiar with and respect University, School, and Departmental policies for PhD students.** The advisor has a responsibility to discuss with the student relevant policies and expectations related to funding, work, research assistantships, teaching assistantships, sick leave, and/or vacation.

Responsible conduct:

- **The faculty advisor is expected to become familiar with University and professional codes of responsible conduct of research for PhD students.** This responsibility includes reporting any possible violations as required to relevant parties, including to the relevant Dean's offices and to the Office of Institutional Equity.
- **The faculty advisor has a responsibility to discuss and help clarify authorship or intellectual property issues and appropriately recognize the student's contributions to any collaborative work.**
- **The faculty advisor is expected to complete Title IX Training regarding sexual misconduct and sexual harassment as required by the University.**

Continuous improvement as an advisor:

- **The faculty advisor should participate in regular mentor training and best practices discussions.** This responsibility includes striving to be a better mentor and to learn tips and practices that improve their work and skills as an advisor. The faculty advisor should also ask advisees for constructive feedback on their mentoring effectiveness.
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Expectations for PhD students:

Research:

- **The PhD student is expected to work with the advisor to develop a thesis/dissertation project.** This responsibility includes establishing a timeline for each phase of thesis research and striving to meet established deadlines.
- **The PhD student should seek guidance from their faculty advisor, while also aspiring increasingly for independence.**
- **The PhD student is expected to engage in scholarly activities beyond their primary research responsibilities.** The student should attend and participate in research-related meetings and seminars relevant to their research area and should also endeavor to explore connections outside of their specific research area.
- **Changing advisors.** In rare circumstances, it may be beneficial to end an advisor-advisee partnership. This can be for many reasons, for example: either the student or advisor may not be meeting departmental expectations; the student and advisor may have a conflict that cannot be resolved; or the student or advisor may feel uncomfortable with their treatment in the mentoring relationship. In such cases, it is recommended that the student or advisor talk with members of the Dissertation Committee (when there is one) who may be able to provide useful advice. In cases where the student needs to change advisors, they should then talk with the DGS who works with the student to determine a course of action. Alternatively, the student may talk with the Chair or Associate Chair.

Academic Preparation and Progress:

- **The PhD student has primary responsibility for the successful completion of their degree.**
- **The PhD student is expected to be familiar with academic milestones and to strive to meet all milestones within the expected timeframe.**
- **The PhD student is expected to meet regularly with the faculty advisor at least monthly.** This responsibility includes providing the advisor with updates on progress, outcomes, and challenges in research, coursework, and professional activities. The advisor and the student should agree on expected frequency of and preparation for meetings, and may use meetings to brainstorm ideas, troubleshoot challenges, and outline expectations.
- **The PhD student is expected to participate in a formal annual meeting with the advisor to discuss academic progress and next steps in the academic program.** The student should ensure that the document summarizing this discussion is completed and submitted in accordance with program requirements. It is recommended that the student should also seek out suggestions and feedback from members of the Dissertation Committee (when there is one).

- **The PhD student is expected to understand the relevant parameters (responsibilities and compensation) of their funding package.** The student should periodically review their funding package with the faculty advisor (and other departmental personnel as appropriate). The student should clarify any additional work and/or teaching expectations connected to their funding.

Professional development:

- **The PhD student has primary responsibility to identify their professional goals and to develop their career plan following completion of the PhD degree.** This responsibility includes familiarizing themselves with professional development opportunities within Duke (including Duke Options and Career Center resources) and externally. Students should identify specific activities to pursue that will advance their professional development and networking.
- **The PhD student is expected to prepare a Professional Development Plan annually that outlines their research and career objectives.** This responsibility includes discussing this plan annually with the advisor and members of the Dissertation Committee. The student should ensure that the document summarizing this discussion is completed and submitted in accordance with program requirements.

Respectful engagement and well-being:

- **The PhD student is expected to be available, within reason, to meet with the advisor upon request.** Under normal circumstances, the student should respond to advisor inquiries (e.g., email, meeting requests, ...) within 7 days when the student is on campus, and within 14 days if away.
- **The PhD student is expected to communicate in a respectful and constructive manner if they have concerns that the advisor is not meeting the expectations outlined in this document.**
- **The PhD student has primary responsibility for their well-being and should consider discussing any concerns with the advisor or departmental officers (DGS, Chair, Associate Chair) and should connect with available resources such as Duke Reach when needed.** In cases of possible harassment or other mistreatment, the student may contact departmental officers (DGS, Chair, Associate Chair) or the Senior Associate Dean of the Graduate School.

Policies:

- **The PhD student is expected to be aware of and to comply with University, school, and department-specific policies and requirements for PhD students.** The PhD student has a responsibility to discuss with the advisor relevant policies,

commitments, and expectations related to funding, work, research assistantships, teaching assistantships, sick leave, or vacation.

Responsible conduct:

- **The PhD student is expected to follow University policies and procedures concerning responsible conduct for PhD students.** This responsibility includes completing the responsible conduct of research training requirements for the Duke Physics PhD degree. The student should also discuss authorship and intellectual property issues with the advisor as appropriate.
- **The PhD student is expected to complete Title IX Training regarding sexual misconduct and sexual harassment as required by the University.**