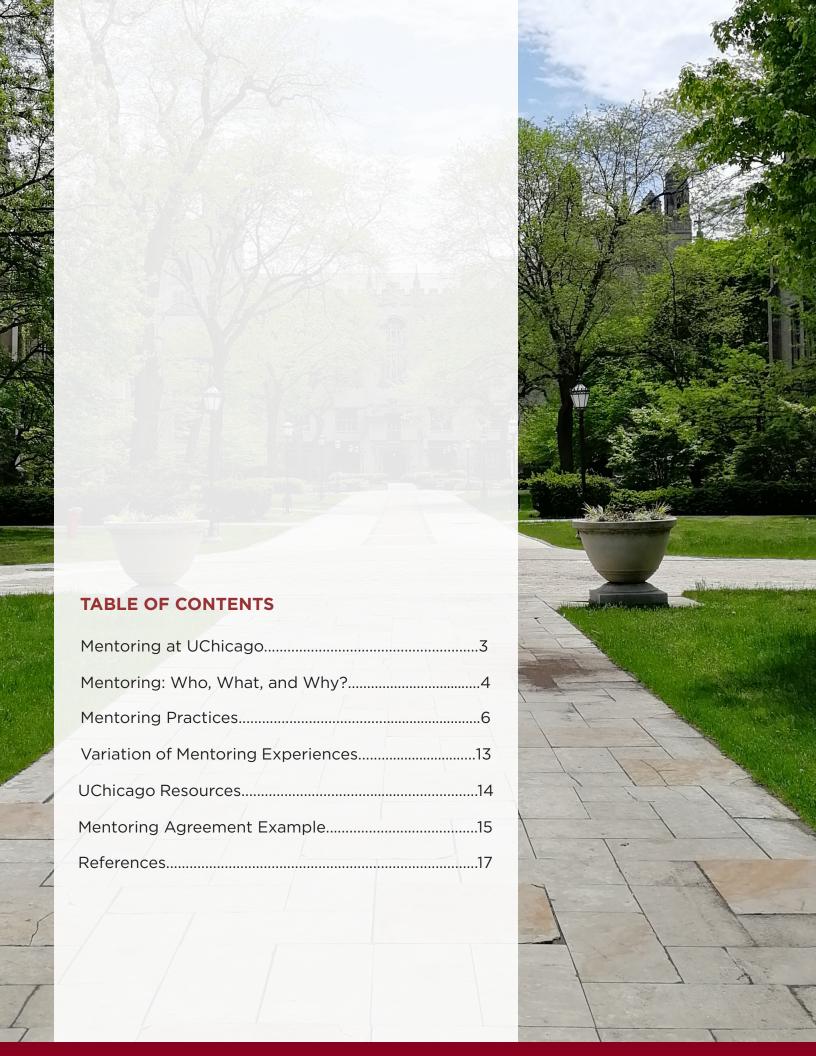


MENTORING GRADUATE STUDENTS



UCHICAGO

Faculty Development Program





MENTORING AT UCHICAGO

The Report of the University of Chicago Committee on Graduate Education (2019) highlighted the importance of mentoring graduate students, and the ways in which the University can strengthen this commitment. In particular, the committee identified opportunities for improving timeliness in students' receiving feedback on research, increasing mentorship in teaching, and focusing more on career advising. Research has also shown that effective mentorship of graduate students leads to better outcomes and positive effects on "academic achievement, retention, and degree attainment as well as on career success, career satisfaction, and career commitment."

The report also indicated that many departments, divisions, and schools are making changes and improving structures to support graduate students at the University, through both mentoring and advising. This toolkit focuses specifically on mentoring, which is broader and less formal than advising.

This toolkit aims to complement resources developed within departments and divisions while specifically addressing the UChicago context. The toolkit:

- Proposes general principles for mentoring.
- Chronicles promising mentoring practices across the University.
- Highlights the importance of diversity and inclusion across divisions, schools, and student populations.
- Catalogues physical, social, and online resources that faculty can share with graduate students.

MENTORING: WHO, WHAT, AND WHY?

"The key to [President Harper's] whole conception of the University was investigation, research, discovery of something new, whether of fact, of method, or of valuation. His ideal was that the University not merely duplicate what other universities had been doing..."

- DEAN ALBION SMALL (DEAN OF THE GRADUATE SCHOOL OF ARTS AND LITERATURE, 1905-1925)2

What is Mentoring?

Since its inception, the University of Chicago has been firmly committed to rigorous inquiry and discovery. The University's first president, William Rainey Harper, recognized the importance of recruiting the best faculty who could train the next generation of scholars and researchers committed to this vision of furthering knowledge.

Mentoring refers to practices faculty use to guide graduate students through their academic, professional, and career development.³ It entails the mentor having an expansive role in the development of graduate students.

In contrast, advising refers to practices that help graduate students with their academic progress, while mentoring is more expansive in scope. In addition to helping with academic progress, mentors address career and professional development, along with psychosocial needs.

Academic Progress

Degree Requirements

- Ensure that requirements and policies for graduate program are clear.
- Help the student understand and plan for program plan of coursework, research, timeline.
- Give regular feedback on degree requirements, coursework, etc.

Thesis and/or Dissertation Research

- Help select thesis or dissertation topic, and formation of committee.
- Provide training on research methods, design, literature search, and writing.
- Provide timely, regular, and honest feedback on dissertation research; monitor, guide, and oversee the research.
- Assist with identifying support for dissertation research.
- Provide feedback and constructive critique on other professional work (presentations, papers, reviews, etc. as appropriate).

Career and Professional Development

- Promote professional exposure, such as invitations to research and writing projects, and also share these collaborations with other faculty and colleagues.
- Coach and guide in navigating politics in the University and the field of study.
- Provide assignments that increase competence and skills.
- Facilitate interactions with other scholars through networks, professional meetings, conference presentations, and more.
- Provide guidance, support, feedback, and constructive critique with job applications, recommendation letters, job interviews, campus visits, and other professional activities (webpages, CV, etc.) as appropriate.
- Give feedback and advice on students' teaching and other engagements in the University.
- Serve as a sponsor by nominating for awards, promoting publications, and recommending for key positions.
- Give honest advice on job and career prospects; help students whose work is unlikely to secure them academic employment understand this as early as possible; counsel them out of the program as needed, and direct them to appropriate University career resources.
- Help students make informed choices about their careers and fields and understand their possibilities and potential limitations.

Advisors can be mentors to their graduate students, and students may have other mentors in addition to their primary advisor. Research conducted with 9,036 PhD trainees has shown that doctoral students who have mentors in addition to their advisors are more likely to have positive educational experiences and successful outcomes (such as publications and research presentations) than those who rely on a single advisor.⁵

Considerations for Effective Mentoring

Mentoring should foster professional growth for the mentee and also be a positive experience for mentors and mentees, free from stress or tension. In addition to advising on course selections and providing research feedback, mentors support students' professional and personal development.⁶ Consider the various components that make up the mentoring process as you get started:⁷

- **Time commitment:** How much time can one realistically devote to mentoring?
- **Perception toward student mentoring:** Why does one choose to mentor? How does one think about one's student or the mentoring process?
- Perception of competence to mentor: In what areas is the mentor confident about guiding the student? In what areas is the mentor lacking? Where might the mentor find guidance in those areas?

Benefits of Mentoring

Many UChicago graduate students describe the importance of mentoring from their advisors and from others in their department.⁸ Research also shows that positive mentoring relationships were associated with better graduate student outcomes including socialization, writing productivity, feelings of satisfaction, and progress to degree milestones.⁹

In addition, good mentorship has been associated with these benefits for students:

- **Professional skill development:** "Learning the ropes" of a discipline.
- **Professional confidence:** Mentors expressing confidence in students.
- **Networking:** Making connections with other faculty and people in the field.
- **Predoctoral productivity:** Publications and conference presentations.
- **Dissertation success:** Program completion and timely progress.¹⁰





MENTORING PRACTICES

"The students of the Graduate Schools had their part in [the President's report] in laboratory and field work and in the seminars, in which small groups of advanced students met with a professor, from time to time, to work out problems given them for investigation."

- THOMAS GOODSPEED, AUTHOR OF A HISTORY OF THE UNIVERSITY OF CHICAGO

The University of Chicago has always emphasized the interaction between graduate students and professors. Through faculty members' own personal and professional experiences, disciplinary expertise, and network of colleagues, they are viewed as experts in their academic fields. Many faculty members also take on the role of mentors, promoting the professional—and at times personal—growth of the graduate students they are training.

Suggested Practices for Mentoring Graduate Students

Be Available

Many students who are unsatisfied with their mentoring experience highlight the inaccessibility of mentors as a concern, rather than the mentor's lack of expertise.¹³ This problem can occur if mentors are too busy to meet with students, or if they are inconsistent or late in providing feedback on writing and research.

Strategies:

- Share any policies regarding availability and consider an open-door policy (within limits), particularly when students initiate contact.¹⁴
- Provide clarity of form and function of the mentoring relationship though a mentoring agreement.

Establish Trust

Without trust, graduate students may be cautious about revealing their goals and challenges to someone in a position to influence their career. Consider spending time building trust with students. In the sciences, these conversations might be held as you develop research plans together. In other fields, consider making specific time to explore these questions.

Strategies:

- Review the student's CV and identify areas of commonality and mutual interest.
- Ensure privacy and uninterrupted time when meeting.
- Ask about people who have influenced the student and talk about people who have influenced you.
- Share stories about your career path.
- Explore the student's career motivations.
- Compare learning styles and personality traits that may give you and the student insight about one another.
- Ask about the student's thoughts on collaboration and team research projects.

- Why did you choose this degree?
- Are there things you want me to know about your professional, social, or personal life?
- How do you deal with adversity?
- How do you communicate best with others, particularly when experiencing strong emotions?
- How do you think I can best help you as a mentor?

Align Expectations

Along with building trust, it's important for mentors and students to be clear about expectations of one another and the mentoring relationship. It may be helpful to put your expectations in writing. Some expectations that can be addressed include:

- Interactions: How will you use your face-to-face meetings? How will each of you prepare for the meetings? What are shared expectations for timeliness and handling distractions? How often will you meet?
- Student's long-term and short-term goals: What are the student's immediate and longterm plans and aspirations? How can the student accomplish these, given program requirements and timeframes?
- Assessments: What type of feedback does the student expect? How long can the student expect to wait in order to receive feedback? How can students remind faculty if feedback is not received within a specified time?

- Collaboration: How will the mentor and student collaborate on research projects? How will other collaborators and co-authors help the student? Which tasks will be delegated to students and which ones will be the mentor's responsibility?
- **Drafts:** What are the expectations for research drafts?
- Publication and presentation: Which journals and conferences should the student target? How will co-authored and collaborative research be initiated, executed, and documented?
- Intellectual property: Who owns and has access to the data being collected? Are there copyright and patent agreement issues that may arise?¹⁵





CREATE A MENTORING AGREEMENT

Faculty and students may have different understandings, assumptions, and expectations about mentoring. You may think that students are looking for answers, but they may actually just want to share thoughts, explore ideas, or get validation. By discussing and recording concerns, expectations, limitations, and boundaries early on, mentors and graduate students can build a strong working relationship from the start.

Strategies:

- Talk about assumptions regarding your roles and expectations.
- Discuss the student's goals.
- Discuss the role of confidentiality.
- Talk about how best to use your time together.
- Talk about critical issues (e.g., timeliness, follow-through).
- Set ground rules for your interactions (e.g., coming prepared, norms for cancelling an appointment, etc.).
- Review departmental expectations for milestones.
- Agree on mechanism and frequency of providing feedback to the student.
- Agree on mechanism and frequency of receiving feedback from the student.
- Prepare a written mentoring agreement and ask for the student's input.



- How often do you think we should meet?
- How can we stay on track and be productive?
- How should we prepare before each meeting?
- What else do you need to make these meetings comfortable and productive?



Maintain Communication

The ongoing effectiveness of the mentoring relationship depends on open and honest communication.¹⁶ It is important that both the mentor and student can share information with each other honestly and be familiar with each other's means and preferences for communicating.

Considerations for the mentor:

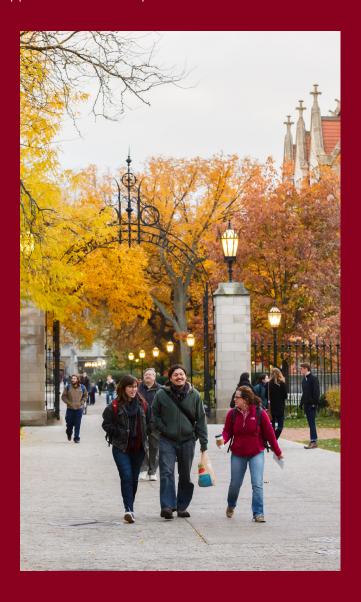
- **Communication channels:** What circumstances necessitate face-to-face meetings, phone calls, or web conferences versus communicating by email?
- **Expectations and assumptions:** What are the possible expectations and assumptions students may have given their family or educational backgrounds or identities?
- **Feedback and concern:** How do faculty and students want to receive and give feedback about research, courses, etc.? What is the most effective way to give and receive feedback?
- Listening: How effectively does the mentor listen to the student's ideas, requests, and needs?

CONSIDER HOW TO EFFECTIVELY MENTOR REMOTELY

Mentoring remotely may result in disengagement if not carefully organized and maintained. It is wise to use various communication channels to support the relationship.

Strategies:

- Establish new expectations about when, how, and how often you expect to meet with your mentee.
 - Will you meet via Zoom? Facetime? Phone?
 - How often should mentees send updates via email?
- Find an environment that enables uninterrupted video and audio communication.
- Review goals and expectations with your mentee regarding research progress and consider how these may need to adjust based on new constraints.
- Agree on meeting discussion topics in advance.
- Ask the mentee to send a follow-up email after each meeting summarizing their reflections and next steps.
- Select a convenient mode of communication, such as text or email, through which the mentee can ask questions or share concerns and receive a prompt response.
- Try to be flexible and prepared to respond to impromptu meeting requests.
- Consider using a communication tool like Slack or Microsoft Teams to send, save, and organize messages and documents exchanged between you and your mentee.
- Help your mentee stay connected with peer writing groups, journal clubs, and departmental seminars.
- Acknowledge disruptions and uncertain times, along with any distress that mentees may express. Make yourself available to assist them within boundaries.
- Provide resources and information about psychological wellness, financial support, or social identity affinity spaces that may help your mentee.



- This particular time is fairly uncertain and disruptive. How does it affect the time you can give to research?
- How are you generally doing? Are there ways I can help?
- Do you have access to our department's seminar series, writing groups, etc.?

Provide Feedback

Good mentors give honest feedback on students' work and progress.¹⁷ Given the richness of experience and expertise mentors have, they can provide feedback and advice on various aspects of the graduate student experience as well as track and acknowledge students' progress and achievement.

Considerations for the mentor:

- Form of feedback: Graduate students appreciate written, timely, clear, and constructive feedback "with a focus on acknowledging their successes and guiding them towards future improvement." ¹⁸
- Areas to provide feedback on: Mentors can give feedback on academic or course choice and performance, teaching and instruction improvement, research progress, research projects, writing and publications, and conference presentations.¹⁹
- **Check-ins:** Schedule regular check-ins with your student.
- **Display openness:** People's identities and experiences can influence the ways they receive constructive feedback and move forward with research. Awareness and understanding of people's backgrounds thus is important for enhanced growth, collaboration, contributing different perspectives in problem-solving, and greater effectiveness in research.²⁰
- Be honest: Students who are struggling to produce high quality work need to be told that their academic progress is insufficient, made to understand the nature of the deficiencies, and given an opportunity to meet the challenge. If a mentor is convinced that the student cannot succeed in producing a dissertation that makes a substantial contribution to the field, the student should be told as early as possible.



SCHEDULE CHECK-INS

Consider scheduling regular check-in meetings. These may be more frequent at the start of a student's graduate school experience and become less frequent as the student gains more independence. You may use these meetings to identify areas of satisfaction and challenge, students' insights, their goals, and progress.

Strategies:

- Identify what student progress you see as particularly strong and productive.
- Discuss learning up-to-date material, particularly related to one's discipline.
- Ask students to share examples of the kind of support they find valuable.
- Ask for and identify challenges that you see for the student.
- Evaluate opportunities and challenges that are currently in place.
- Request feedback on your approach.
- Encourage independence.

- What have you learned from this experience so far?
- What do you find challenging? Why?
- What are some things you are doing differently as a result of our conversations?
- What else do you need to make these meetings comfortable and productive?
- Are you stretching yourself intellectually?
- Are you following through on your professional development goals?
- What else can I do to help you?

Guide Professional Development

Beyond providing feedback to graduate students, mentors also guide and help develop students through example, narrative, and modeling. Mentors do so by sharing what they have learned as members of the profession or discipline; identifying workshops, conferences, and networking opportunities for students; and involving students in their research and grant projects.²¹

Questions to ask students:

- What is your strategy for interacting with peers and faculty at this event?
- What would you like to gain from the interactions?

Provide Support and Encouragement

Although providing support and encouragement may not seem necessary for a successful mentor-student relationship, such availability for encouragement, active listening, and personal assurance helps students when doubts, difficulties, and other circumstances get in the way of their performance and work.²² Especially for underrepresented students, such support and guidance can enhance their recruitment and retention in their chosen fields.²³ Note that support and encouragement are not provided to make students dependent on positive affirmations, but to help them navigate their academic paths towards greater independence and autonomy.²⁴ It is unethical to encourage a student to pursue a path that is unlikely to lead to success, however; if academic progress is not being made, encourage the student to explore alternative career paths. It is also important to address issues or concerns carefully and as soon as possible.

ADDRESS PROBLEMS OR CONCERNS

If a problem arises, it is best to address it as early as possible. Delaying this process and not being transparent with a student may lead to larger problems or concerns.

Strategies:

- Pay attention to hunches. When something seems wrong, check it out.
- Don't leave long gaps between meetings.
- Provide constructive feedback on a regular basis.
- Consider how you might be contributing to the problem (e.g., have you given timely feedback?
 Did you ask a student to tackle a problem that they were not equipped to do?).
- Focus on fixing the problem.
- Avoid lack of preparation by designating specific times to give feedback on different tasks: writing, data collection, analysis, presentations, etc.
- Structure feedback to include the goal and steps toward reaching the goal.
- Be direct.
- Use challenges as an opportunity for growth.

- I sense you are struggling with following through on your commitments. Do you feel that way, too?
- I feel like you are not making progress. Do you feel the same way?
- You've been late to our last several meetings. Is anything conflicting with our meeting times?
- You agreed to send me a draft three weeks ago, but I haven't received it yet. What's going on?
- We want this manuscript ready for publication by June. Here are three things I see that need work. What specific steps do you think you should take?



VARIATION OF MENTORING EXPERIENCES

"The requirements for the degree of Ph.D. were exacting.... The degree was given, not on the basis of the completion of a certain amount of time spent upon a specified program, but as the recognition and mark of high attainments and ability in the candidate's chosen province."

- THOMAS GOODSPEED, AUTHOR OF A HISTORY OF THE UNIVERSITY OF CHICAGO²⁵

The University of Chicago has long offered graduate studies in a wide variety of disciplines. Diversity itself is also a core value of the institution, and the University welcomes and values members of its academic community with different backgrounds and experiences. Given different disciplinary conventions, personality types, student characteristics, and academic levels, having a one-size-fits-all mentoring checklist is unrealistic. Here are some examples of how mentoring might shift depending on the context:

Disciplinary Differences

Mentorship in science, technology, engineering, and mathematics (STEM) fields has been described as less about one-on-one apprenticeship and more about group mentorship opportunities, with teams of faculty, postdoctoral researchers, graduate students, and undergraduate students interacting with one another.²⁶ Additionally, students in certain disciplines have mentors as well as advisors without posing any territorial conflicts.²⁷

Underrepresented Graduate Students

Mentoring is particularly important for students who are underrepresented in the academy "who often lack access to informal networks and information required to be successful in academic and professional environments in which they are underrepresented." This group can include students of color, women students in STEM fields, highneed students, first-generation students, students with disabilities, military-affiliated students, nontraditional students, religious students, and more.

International Students

International students may encounter specific concerns that arise from social or professional isolation or linguistic and cultural challenges. These challenges may include limited ability to travel home, challenges obtaining and renewing visas, inability to easily use English at the professional level, and more. Mentors should be aware of these challenges when working with international students.²⁹

Masters vs. Doctoral Students

Given the shorter amount of time masters students are at the University, feedback and mentor-student interaction should take shorter timelines into consideration. For students engaged in doctoral studies, mentoring will mean different things at different points in their academic careers. At the start of their training, the mentor will need to advise students on courses, short-term goals, and specific instructions. For more advanced students, mentoring will entail guiding them in laboratory work, research, teaching, presentation development, and dissertation writing.³⁰

Peer Mentoring

In some cases, senior graduate students become mentors to new graduate students, reinforcing students' professional development in addition to the traditional faculty-student relationship. Peer mentoring does not—and should not—eclipse the important mentorship opportunity between faculty and student but should complement and supplement it.³¹

UCHICAGO RESOURCES

Individual mentors have different levels of inherent and acquired mentoring skills. However, everyone can improve their skills with discussion, practice, and feedback—inclusive of self-reflection and intentional practice.³² The University offers various opportunities for mentors to learn and share about effective mentorship practices.

Although the work of, and the relationship with, a mentor is of crucial importance to graduate students, faculty mentors are not the sole resource available to graduate students. Feel free to direct students to these and other resources as needed.

Reading, Writing, and Teaching

UChicagoGRAD

- Graduate writing consultants are available to meet with students about scholarly works in progress.
- Writing Workshops, Write-Ins, and GRAD Writing Rooms are held regularly to support graduate student work. Information about upcoming events is available in the GRAD Guide Weekly emails.
- Academic Exchange Programs allow doctoral students to take advantage of faculty, classes, and research centers at 25 partner institutions.
- GRADTalk is a series of programs and resources designed to help graduate students and postdoctoral researchers increase the impact of their scholarship and develop public speaking skills.
- Career development opportunities include career advisement, professional workshops, practice interviews, internship programs, job searches, and career fairs.

Chicago Center for Teaching (CCT)

- Several orientations focus on topics such as teaching at UChicago, teaching in the Core, jumpstarting your teaching, and more.
- Seminars and workshops are offered on a number of topics, including:
 - Fundamentals of Teaching Series
 - Teaching Portfolios
 - Teaching Statement
 - Creating Lesson Plans
 - Course Design
 - Core Pedagogy
 - CCT Fellows Initiatives
- Inclusive pedagogy workshops, reading groups, and other programs share information on how to create more inclusive classroom environments.



Health and Wellness

- UChicago Student Wellness
- Department of Athletics and Recreation
- Student Disability Services
- Financial wellness resources and workshops are offered throughout the year. Visit <u>grad.uchicago.</u> <u>edu/financial-wellness</u> for the latest offerings.

Family and Community

Family Resource Center

Additional Resources

- Office of International Affairs
- Center for Identity + Inclusion
- Center for Leadership and Involvement
- Spiritual Life



MENTORING AGREEMENT EXAMPLE

This example was adapted from the Association of American Medical Colleges, University of Kansas, and University of Wisconsin.

Commitments of Graduate Student

- I acknowledge that I have the primary responsibility for the successful completion of my degree, and the development of my own career.
- I will meet regularly with my research advisor to provide updates on the progress and results of my coursework, research, and professional and career development activities.
- I will work with my research advisor to develop a thesis/dissertation project, inclusive of establishing a timeline, and meeting set goals and deadlines.
- I will work with my research advisor to select a thesis/dissertation committee.
- If working in a laboratory, I agree to take part in shared laboratory responsibilities and will use resources responsibly.
- I will maintain detailed, organized, and accurate research records.
- I will discuss policies on work hours, medical leave, and vacation with my graduate program and research advisor.
- I will discuss policies on authorship and attendance at professional meetings with my research advisor.
- I will be knowledgeable of the policies and requirements of my graduate program, graduate school, and institution.
- I will attend and actively participate in laboratory meetings, seminars, and workshops that are part of my educational program.

Commitments of Research Advisor/Mentor

- I will be supportive, accessible, encouraging, inclusive, and respectful of the graduate student.
- I commit to meeting one-on-one with the student on a regular basis. I will also regularly review the student's progress and provide timely feedback and goal-setting advice.
- I am committed to the graduate student's research project.
- I will help the graduate student select a thesis/ dissertation committee.
- I will provide an intellectual environment that is stimulating and supportive.
- I will demonstrate respect for all graduate students as individuals without regard to gender, race, national origin, religion, disability, or sexual orientation.
- I am committed to helping identify financial resources, as appropriate and according to my institution's guidelines, for the graduate student to conduct research.
- I will discuss authorship policies regarding papers with the graduate student.
- I will be knowledgeable of and guide the graduate student through the requirements and deadlines of the graduate program and institution, as well as any teaching requirements, and human resource guidelines.
- I will encourage the graduate student to attend and present research at scientific and professional meetings.
- I will promote training of the graduate student in professional skills needed for a successful career.

Other Expectations for Consideration

- Goals: What do you hope to achieve as a result of this relationship?
- Progress to date: Outline the research, writing, and other work that must completed for the thesis or dissertation.
- *Milestones and timeline:* Provide detailed information on the expected steps towards the completion of the research, including drafts, revisions, and final submission.
- Feedback and revision: Explain who will provide feedback to the student and with what frequency.
- *Professional practice:* What is expected of the student in terms of professional practice (e.g., communicating with the mentor, preparing for meetings, expectations of the graduate student)?
- Consequences: What steps will be taken if the student does not complete the thesis or dissertation by the expected completion date?
- Relationship evaluation effectiveness: How will you openly evaluate the effectiveness of the relationship?



REFERENCES

- Bagaka's, J. G., Badillo, N., Bransteter, I., & Rispinto, S. (2015). Exploring Student Success in a Doctoral Program: The Power of Mentorship and Research Engagement. *International Journal of Doctoral Studies, 10*, 323–342. https://doi.org/10.28945/2291
- Barker, R. T., & Pitts, M. W. (1997). Graduate Students as Mentors: An Approach for the Undergraduate Class Project. Journal of Management Education, 21(2), 221-231. https://doi.org/10.1177/105256299702100207
- Barnes, B. J., & Austin, A. E. (2009). The Role of Doctoral Advisors: A Look at Advising from the Advisor's Perspective. *Innovative Higher Education*, 33(5), 297–315. https://doi.org/10.1007/s10755-008-9084-x
- Bert. A. (2018). Three reasons gender diversity is crucial to science. Elsevier Connect. Amsterdam, NL: Elsevier.
- Bhatia, S., & Amati, J.P. (2010). "If these women can do it, I can do it, too.": Building women engineering leaders through graduate peer mentoring. *Leadership and Management in Engineering 10*(4): 174-184.
- Bloom, J. L., Propst Cuevas, A. E., Hall, J. W., & Evans, C. V. (2007). Graduate Students' Perceptions of Outstanding Graduate Advisor Characteristics. *NACADA Journal*, *27*(2), 28–35. https://doi.org/10.12930/0271-9517-27.2.28
- Boyle, P., & Boice, B. (1998). Best Practices for Enculturation: Collegiality, Mentoring, and Structure. *New Directions for Higher Education, 1998*(101), 87–94. https://doi.org/10.1002/he.10108
- Brown, M. C., Davis, G. L., & McClendon, S. A. (1999). Mentoring Graduate Students of Color: Myths, Models, and Modes. *Peabody Journal of Education*, 74(2), 105–118.
- Brunsma, D. L., Embrick, D. G., & Shin, J. H. (2017). Graduate Students of Color: Race, Racism, and Mentoring in the White Waters of Academia. *Sociology of Race and Ethnicity, 3*(1), 1-13. https://doi.org/10.1177/2332649216681565
- Byars-Winston, A., & Dahlberg, M.L., eds. (2019). The Science of Effective Mentorship in STEMM (Science, Technology, Engineering, Mathematics, and Medicine). Washington, DC: The National Academies of Sciences, Engineering, and Medicine.
- Clance, P.R., & Imes, S.A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice, 15*(3), 241-247.
- Committee on Graduate Education. (2019). Report of the University of Chicago Committee on Graduate Education. The University of Chicago.
- Curtin, N., Malley, J., & Stewart, A. J. (2016). Mentoring the Next Generation of Faculty: Supporting Academic Career Aspirations Among Doctoral Students. *Research in Higher Education, 57*(6), 714-738. https://doi.org/10.1007/s11162-015-9403-x
- Dennehy, T.C., & Gasgupta, N. (2017). Female peer mentors early in college increase women's positive academic experiences and retention in engineering. *Proceedings of the National Academy of Sciences of the United States of America*. 114(23): 5964-5969.
- Doctoral Education Review Committee. (2019). Report of the Social Sciences Division Doctoral Education Review Committee. The University of Chicago.
- Feldon, D. F., Maher, M. A., Hurst, M., & Timmerman, B. (2015). Faculty Mentors', Graduate Students', and Performance-Based Assessments of Students' Research Skill Development. *American Educational Research Journal*, 52(2), 334–370. https://doi.org/10.3102/0002831214549449
- Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education, 36*(1), 51-62. https://doi.org/10.1080/02602930903197883
- Fugate, G. A., Jaramillo, P. A., & Preuhs, R. R. (2001). Graduate Students Mentoring Graduate Students: A Model for Professional Development. *PS: Political Science & Politics, 34*(1), 132-133. https://doi.org/10.1017/S1049096501000208
- Goodspeed, T.W. (1916). A History of the University of Chicago, Founded by John D. Rockefeller. Chicago, IL: University of Chicago Press.
- Humanities Division Doctoral Education Review Committee. (2019). Report of the Humanities Division Doctoral Education Review Committee. The University of Chicago.

- Jacobi, M. (1991). Mentoring and Undergraduate Academic Success: A Literature Review. *Review of Educational Research*, 61(4), 505-532. https://doi.org/10.3102/00346543061004505
- Johnson, B. W., & Huwe, J. M. (2002). *Getting Mentored in Graduate School*. Washington, DC: American Psychological Association.
- Lunsford, L. (2012). Doctoral Advising or Mentoring? Effects on Student Outcomes. *Mentoring & Tutoring: Partnership in Learning*, 20(2), 251–270. https://doi.org/10.1080/13611267.2012.678974
- Lunsford, L. G., Crisp, G., Dolan, E. L., & Wuetherick, B. (2017). Mentoring in Higher Education. *In Sage Handbook of Mentoring* (pp. 316–334). New York, NY: Sage Publishing.
- Mannix, E., & Neale, M.A. (2005). What differences make a difference? The promise and reality of diverse teams in organizations. *Psychological Science in the Public Interest*, 6(2), 31-55.
- Montgomery, B. L., Dodson, J. E., & Johnson, S. M. (2014). Guiding the Way: Mentoring Graduate Students and Junior Faculty for Sustainable Academic Careers. *SAGE Open, 4*(4), 2158244014558043. https://doi.org/10.1177/2158244014558043
- Myers, B. E., & Dyer, J. E. (2005). A Comparison of the Attitudes and Perceptions of University Faculty and Administrators toward Advising Undergraduate and Graduate Students and Student Organizations. *NACTA Journal*, 49(4), 34-40. Retrieved from JSTOR.
- Nettles, M. T., & Millett, C. M. (2006). Three Magic Letters: Getting to Ph.D. Baltimore: Johns Hopkins University Press.
- Patterson-Stewart, K. E., Ritchie, M. H., & Sanders, E. T. W. (1997). Interpersonal Dynamics of African American Persistence in Doctoral Programs at Predominantly White Universities. *Journal of College Student Development*, 38(5), 489-498.
- Rose, G. L. (2005). Group Differences in Graduate Students' Cooncepts of The Ideal Mentor. *Research in Higher Education*, 46(1), 53-80. https://doi.org/10.1007/s11162-004-6289-4
- Rudolph, B. A., Castillo, C. P., Garcia, V. G., Martinez, A., & Navarro, F. (2015). Hispanic Graduate Students' Mentoring Themes: Gender Roles in a Bicultural Context. *Journal of Hispanic Higher Education, 14*(3), 191–206. https://doi.org/10.1177/1538192714551368
- Schlosser, L., Knox, S., Moskovitz, A., & Hill, C. (2003). A Qualitative Examination of Graduate Advising Relationships: The Advisee Perspective. *Journal of Counseling Psychology, 50*(2), 178-188.
- Schlosser, L. Z., Lyons, H. Z., Talleyrand, R. M., Kim, B. S. K., & Johnson, W. B. (2011). Advisor-Advisee Relationships in Graduate Training Programs. Journal of Career Development, 38(1), 3-18. https://doi.org/10.1177/0894845309358887
- Thomas, K. M., Willis, L. A., & Davis, J. (2007). Mentoring minority graduate students: Issues and strategies for institutions, faculty, and students. *Equal Opportunities International, 26*(3), 178–192. https://doi.org/10.1108/02610150710735471
- Titus, S. L., & Ballou, J. M. (2013). Faculty Members' Perceptions of Advising Versus Mentoring: Does the Name Matter? *Science and Engineering Ethics, 19*(3), 1267–1281. https://doi.org/10.1007/s11948-012-9366-7
- University of California, Berkeley Graduate Council. (2006). *Best Practices for Faculty Mentoring of Graduate Students*. University of California, Berkeley.
- University of Michigan. (2019). How to Mentor Graduate Students: A Guide for Faculty. University of Michigan.
- Weil, V. (2001). Mentoring: Some ethical considerations. *Science and Engineering Ethics, 7*(4), 471-482. https://doi.org/10.1007/s11948-001-0004-z
- Zelditch, M. (1990). Mentor Roles. In *Proceedings of the 32nd Annual Meeting of the Western Association of Graduate Schools*.

- ¹ Byars-Winston and Dahlberg (2019), p. 6.
- ² Goodspeed 1916, 371-72.
- ³ Johnson and Huwe (2003), p. 19.
- ⁴ Zelditch (1990) writes that mentors have six distinct dimensions. They are "advisors, people with career experience willing to share their knowledge; supporters, people who give emotional and moral encouragement; tutors, people who give specific feedback on one's performance; masters, in the sense of employers to whom one is apprenticed; sponsors, sources of information about, and aid in obtaining opportunities; models of identity, of the kind of person one should be..."
- ⁵ Nettles and Millet (2006).
- ⁶ Schlosser et al. (2011).
- ⁷ Myers and Dyer (2005).
- ⁸ Samples include the Report of the University of Chicago Committee on Graduate Education (March 2019), Report of the Social Sciences Division Education Review Committee (March 2019), and Report of the Humanities Division Doctoral Education Review Committee (September 2019).
- ⁹ Lunsford (2012). See also: Lunsford, Crisp, Dolan, and Wuetherick (2017), and Bagaka's, Badillo, Bransteter, and Rispinto (2015).
- ¹⁰ Johnson and Huwe (2003), pp. 29-32.
- ¹¹ Goodspeed (1916), p. 372.
- ¹² Bloom, Propst-Cuevas, Hall, and Evans (2007).
- ¹³ See for example the Report of the Humanities Division Doctoral Education Review Committee (September 2019), p. 11-12.
- ¹⁴ See: Barnes and Austin (2008), pp. 310-311. However, we do not suggest with open-door policy that students can just come in and visit your office to talk. Proper coordination is necessary to see the optimal time when both mentor and student are free to speak with each other.
- ¹⁵ Adapted from the document How to Mentor Graduate Students: A Guide for Faculty by the Rackham Graduate School, University of Michigan (2019).
- ¹⁶ See: Patterson-Stewart, Ritchie, and Sanders (1997).
- ¹⁷ Bert (2018); Mannix and Neal (2005).
- ¹⁸ See: Lee (2012).
- ¹⁹ Ferguson (2011), p. 60.
- ²⁰ Curtin, Malley, and Stewart (2016).
- ²¹ Adapted from How to Mentor Graduate Students (2019).
- ²² Barker and Pitts (1997). See also: Jacobi (1991) and Boyle and Boyce (1998).
- ²³ Bhatia and Amata (2010); Dennehy and Dasgupta (2017).
- ²⁴ Byars-Winston and Dahlberg (2019), p. 104.
- ²⁵ Goodspeed (1916), p. 373.
- ²⁶ Feldon, Maher, Hurst, and Timmerman (2015), p. 360.
- ²⁷ Rose (2005).
- ²⁸ Thomas, Willis, and Davis (2007), p. 178. See also: Brunsma, Embrick, and Shin (2017); Brown, Davis, and McClendon (1999); Montgomery, Dodson, and Johnson (2014); Rudolph et al. (2015).
- ²⁹ Rose (2005).
- 30 Ibid.
- ³¹ Fugate, Jaramillo, and Preuhs (2001).
- ³² Byars-Winston and Dahlberg (2019).