

Research Mentor Training Seminar
Integrated Science 660

Meeting Time

Date, Time

Location

1 credit, In-person

Facilitator Contact Information

Course Description

Seminar participants will work with a community of peers to develop and improve their mentoring skills. By the end of the seminar, participants should be able to clearly articulate a personal mentoring philosophy to anyone inside or outside their discipline and have multiple strategies for dealing with mentoring challenges.

The content of each session is based on the *Entering Mentoring*, 2nd ed. Curriculum¹ and is designed to address the key concerns and challenges identified by research mentors. The topics include:

- Aligning Expectations
- Maintaining Effective Communication
- Assessing Understanding
- Enhancing Cultural Awareness in Mentoring
- Cultivating Ethical Behavior
- Fostering Independence
- Promoting Mentee Self-Efficacy

Seminar Format and Role of the Facilitators

Experiential learning and facilitated discussion are the structural foundation of this research mentor training seminar. The content and process are based on core principles in mentoring, but the outcomes of the seminar are based heavily on the contributions of seminar participants as they integrate their diverse experiences into the seminar materials and activities. The case studies and reading materials provide a starting point for discussion but you are encouraged to move from hypothetical examples to your own experiences with undergraduate researchers. Our role as facilitators is to enable you to take ownership of your own learning by helping you to engage in self-reflection and shared discovery and learning. We will do our best to guide you towards meeting the learning objectives of this seminar, but importantly, our role is not to be an expert on mentoring.

¹ Much of the content of this seminar is adapted from *Entering Mentoring: A Seminar to Train a New Generation of Scientists*; created by Jo Handelsman, Christine Pfund, Sarah Miller, and Christine Pribbenow, with support from Howard Hughes Medical Institute Professors Program (PI: Jo Handelsman). The *Entering Mentoring* Seminar materials were adapted with funding from the National Science Foundation (Grant # 0717731; PI: Christine Pfund). All curriculum is freely available through the [Center for the Improvement of Mentored Experiences in Research](#).

Attendance Policy

You are expected to attend all sessions of the seminar. If you must miss a session, you will be responsible for the material you missed (reading assignments, homework, etc). Please make prior arrangements with the facilitators for the week you will miss which may include submitting your assignment to the facilitators before the session which you will miss.

Accessibility

If you have circumstances that you believe will affect your seminar engagement (for example, visual, hearing, or learning disabilities, or language differences), please let us know as soon as possible so that we may work together to develop strategies for adapting assignments and in-person activities. Please let us know if you have any trouble accessing the Google Drive folder. Please don't hesitate to let us know if you require assistance or accommodations for any reason. We look forward to working with you to meet your learning goals.

We aim to create an environment where all students feel comfortable learning.

All are welcome, regardless of age, race, gender, background, political affiliation, sexual orientation, or any other identity. All students' ideas have value and should be received respectfully. If at any point you feel you are not being respected in Research Mentor Training, please contact the instructor, Dr. Amber Smith (amber.smith@wisc.edu).

UW–Madison Land Acknowledgement Statement

The University of Wisconsin–Madison occupies ancestral Ho-Chunk land, a place their nation has called Teejop (day-JOPE) since time immemorial. In an 1832 treaty, the Ho-Chunk were forced to cede this territory. Decades of ethnic cleansing followed when both the federal and state government repeatedly, but unsuccessfully, sought to forcibly remove the Ho-Chunk from Wisconsin. This history of colonization informs our shared future of collaboration and innovation. Today, UW–Madison respects the inherent sovereignty of the Ho-Chunk Nation, along with the eleven other First Nations of Wisconsin.

Assignments and Expectations

The course will meet weekly 5 times per semester for 120 minutes of instruction. Participants will also engage in mentoring a student outside of class who will work with them for a minimum of 10 hours/week.

All course content and assignments will be posted on the course Google Drive (hyperlink).

Assignments will be due at the end of the day (11:59pm CT) **before** the class session in which we will be discussing it as we will be using your homework as part of class discussion.

Grading scale: Credit/No Credit

Credit will be given to participants who attend at least 80% of the sessions, complete all assignments and readings, and concurrently mentor a student during the seminar.

Learning Objectives for the Research Mentor Training Seminar

Overall Seminar Objective

Seminar participants will work with a community of peers to develop and improve their mentoring skills. By the end of the seminar participants should be able to clearly articulate a personal mentoring philosophy to anyone inside or outside their discipline, and have multiple strategies for dealing with mentoring challenges.

Objectives for Each Seminar Topic

Introduction

Mentors will have the knowledge and skills to:

1. Learn about other mentors in the group and begin building a learning community
2. Reflect on group dynamics and ways to make the group functional
3. Establish ground rules for participation
4. Prepare to establish effective research mentoring relationships with their mentees

Aligning Expectations

Mentors will have the knowledge and skills to:

1. Design and communicate clear goals for the research project
2. Listen to and consider the expectations of their mentee in the mentoring relationship
3. Consider how personal and professional differences may impact expectations
4. Clearly communicate expectations for the mentoring relationship
5. Align mentee and mentor expectations

Maintaining Effective Communication

Mentors will have the knowledge and skills to:

1. Provide constructive feedback
2. Communicate effectively across diverse dimensions including varied backgrounds, disciplines, ethnicities, positions of power, etc.
3. Engage in active listening
4. Use multiple strategies for improving communication (in person, at a distance, across multiple mentors, and within appropriate personal boundaries)

Enhancing Cultural Awareness

Mentors will have the knowledge and skills to:

1. Be more aware of cultural diversity in themselves and others
2. Expand understanding of cultural diversity in mentoring relationships (how cultural diversity dynamics can complicate mentee and mentor experience)
3. Recognize the impact that conscious and unconscious assumptions, preconceptions, biases, and prejudices have on the mentor-mentee relationship and acquire skills to manage them.

Assessing Understanding

Mentors will have the knowledge and skills to:

1. Assess their mentee's understanding of core concepts and processes and ability to develop and conduct a research project, analyze data, and present results
2. Identify reasons for a lack of understanding, including expert/novice differences
3. Use diverse strategies to enhance mentee understanding across diverse disciplinary perspectives

Cultivating Ethical Behavior

Mentors will have the knowledge and skills to:

1. Articulate the ethics issues they need to discuss with their mentees
2. Clarify their roles as teachers and role models in educating mentees about ethics
3. Appreciate the power dynamic inherent in the mentoring relationship.

Fostering Independence

Mentors will have the knowledge and skills to:

1. Define independence, its core elements, and how those elements change over the seminar of a mentoring relationship
2. Employ various strategies to build their mentee's confidence, establish trust, and foster independence
3. Create an environment in which mentees can achieve goals

Promoting Mentee Research Self-Efficacy

Mentors will have the knowledge and skills to:

1. Define self-efficacy and its four sources
2. Identify signs of self-efficacy in relation to research related tasks.
3. Articulate their role in fostering mentees research self-efficacy.

Promoting Professional Development

Mentors will have the knowledge and skills to:

1. Identify the roles mentors plan in the overall professional development of their mentees.
2. Engage in open dialogue on balancing the competing demands, needs, and interests of mentors and mentees (e.g., research productivity, course-work, creativity, independence, career preference decisions, non-research activities, personal development, and work-family balance)

Articulating Your Mentoring Philosophy and Plan

Mentors will have the knowledge and skills to:

1. Reflect on the mentor-training experience
2. Reflect on intended behavioral or philosophical changes
3. Articulate an approach for working with new mentees in the future

Research Mentor Training Seminar Schedule-Spring 20XX

Session	Topics	Readings & Assignments Due
Week 1	<p>Introductions</p> <p>Aligning Expectations</p> <p>Effective Communication</p>	<ul style="list-style-type: none"> Read Handelsman, Pfund, Miller Lauffer, & Pribbenow, (2005). "Mentoring Learned, Not Taught."
Week 2	<p>Enhancing Cultural Awareness in Mentoring</p> <p>Assessing Understanding</p>	<ul style="list-style-type: none"> Read your assigned section of Ch 3 : Mentoring Underrepresented Students in STEMM: Why do identities matter? Write one paragraph describing your mentee's research project and a second paragraph discussing what you hope this paragraph conveys about the image of your discipline. Bring a hard copy to class. Draft mentoring philosophy
Week 3	<p>Promoting Mentee Research Self-Efficacy and Independence</p> <p>The Power of Social Persuasion</p>	<ul style="list-style-type: none"> Read Montgomery, (2018). "From Deficits to Possibilities: Mentoring lessons from plants on cultivating individual growth through environmental assessment and optimization." Read "What is Self-Efficacy?" Read "Nine Ways to Fight Imposter Syndrome" Revise/add to mentoring philosophy
Week 4	<p>Cultivating Ethical Behavior</p> <p>Promoting Professional Development</p>	<ul style="list-style-type: none"> Bring in a copy of the ethics guidelines published by your disciplinary professional society
Week 5	<p>Sharing Mentoring Philosophies and Peer Feedback</p> <p>Colleague Consulting</p>	<ul style="list-style-type: none"> Bring a copy of your mentoring philosophy for peer-review Identify a mentoring challenge you would like to discuss with colleagues

Communicating Your Mentoring Philosophy and Expectations

A mentoring philosophy is a description of how you as a mentor approach supporting your mentee. Your mentoring philosophy is unique to you and may change over time as you work with different mentees, make mistakes, try out new strategies, and adapt for the context of your mentoring. The process of writing a mentoring philosophy can be helpful in identifying what you value as a mentor as well as your approach to mentorship. Your mentoring philosophy may answer the following:

- Why do you mentor?
- What are ideal outcomes for both you and your mentee?
- How do you develop the mentoring relationship?
- What is your role? What is your mentee's role?
- How do you structure your interactions and the mentoring environment to promote success?
- How do you know when a mentoring relationship is working?
- How do you address issues that come up during mentoring?
- How does your own and your mentees' identities, background, experiences, and levels of privilege impact your mentoring relationship?
- How do you engage mentees with different learning and work styles from your own?
- How do you value diversity within your research group? Within your discipline?

How does a mentoring philosophy differ from an expectations agreement?

An expectations agreement is a document that outlines the expectations for the mentor and mentee. The goal of the document is to be clear about the expectations so that both mentor and mentee know what to expect and have a foundation to return to if expectations are not being met. There are as many types of expectations agreements as there are mentors because these documents must be tailored to the mentor and reflect their philosophy. In fact, some mentors weave their philosophy into the expectations agreement.

As part of this seminar, you will be asked to create or revise your mentoring philosophy. Please draft your philosophy by session 2 and continue to add to it throughout the seminar. During our last session you will have the opportunity to receive feedback on the clarity of your philosophy.

Rubric for Statements of Mentoring Philosophy (from the Delta Program)

Possible Components	Excellent	Moderate	Needs work
Goals for mentoring relationships: Why do you mentor? Who do you mentor? What are ideal outcomes for both you and your mentee?	Importance of mentoring for the author is clearly and persuasively articulated. Goals and intended outcomes are clearly explained and specific. They are concise but not exhaustive.	Importance of mentoring and goals are present, but not well articulated or needs refinement.	Articulation of goals is unfocused, vague, incomplete, or missing.
Your approach to mentoring: How do you develop the mentoring relationship? What is your role, and what is your mentee's role? How do you structure your interactions and the mentoring environment to promote success?	Description of approach to mentoring is specific and thoughtful. Includes details and rationale about how the mentoring relationship is developed and practiced by both mentor and mentee. The approaches are clearly connected to specific goals and are appropriate for those goals. Specific examples of approaches are given.	Description of mentoring approaches and roles not clearly connected to goals, or if connected, not well developed (e.g., seems like a list of what mentor does). Approaches are described generically, without examples.	Approaches to mentoring not clearly articulated, or are basic and unreflective.
Evaluation of the mentoring relationship: How do you know when a mentoring relationship is working? How do you address issues that come up during mentoring? What outcomes do you see in your mentees?	Methods for periodic formal or informal evaluation of the mentoring relationship are clearly and concisely described, with strategies for addressing issues that arise. Evaluation and outcomes align with mentoring goals. Examples are present where appropriate.	Description of evaluation or strategies for addressing issues not well developed, or not clearly connected to goals. Approaches are described generically, without specifics or examples.	Evaluation and strategies for addressing mentoring issues are vague, unfocused, incomplete, or missing.
Inclusive mentoring: Does your own and your mentees' identities, backgrounds, experiences, and levels of privilege impact your mentoring relationship? How do you engage mentees with different learning and work styles than your own? How do you value diversity in your discipline?	Portrays a coherent philosophy of inclusive mentoring that is integrated throughout the statement and aligns with goals and approaches. Makes space for diverse ways of knowing and working. Discussion of roles and approaches is sensitive to historically underrepresented individuals within the discipline. Demonstrates awareness of issues of equity within the discipline.	Inclusive mentoring is addressed but in a cursory manner or in a way that isolates it from the rest of the statement. Author briefly connects identity and personal experiences to aspects of his/her mentoring approach and/or goals.	Issues of inclusion are not addressed or addressed in an awkward or vague manner. There is no connection to mentoring approaches.

<p>Structure, rhetoric, and language: How is the reader engaged? Is the language used appropriate for the intended audience? How is the statement structured?</p>	<p>The statement has a guiding structure and/or theme that engages the reader and organizes the goals and approaches articulated in the statement. Jargon is avoided and any discipline-specific terms are given specific definitions that apply to the context. Specific, rich examples are used to support claims. Grammar and spelling are correct.</p>	<p>The statement has a structure and/or theme that is not connected to the ideas actually discussed in the statement, or, organizing structure is weak and does not resonate within the context. Examples are used but seem generic. May contain some jargon.</p>	<p>No overall structure present. Statement is a collection of disconnected ideas about mentoring. Jargon is used liberally and not supported by specific definitions or examples. Needs much revision.</p>
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