



Course Description

The main purpose of the Theory and Practice of Teaching Seminar is to help you synthesize and then apply what you have learned in your education classes up to this point in an actual classroom setting. In our course, we will investigate current theory and practice of teaching science then we will reflect on and develop ways to apply what we learn in our course to your classroom experiences to support your growth and development as a teacher. The seminar course will be a safe, supportive and encouraging place to reflect, share your observations and questions, and discover ways to find success as you work towards developing your craft as an educator. All successful and effective teachers reflect constantly on what goes well, what students understand, what needs to be re-taught, ways to encourage student ownership, and ways to collect evidence of student understanding. You will be collecting field notes during your classroom visits, in person or virtually, to be used in our class and to help you begin the process of reflecting on teaching practices and experiences.

Course Objectives

1. Students will develop the art of reflecting on teaching practices, the art of questioning in the classroom, & the art of inquiry.
2. Students will make connections between class discussions, readings and field experiences and their personal experiences.
3. Students will learn about the teaching cycle (planning, teaching, assessing learning, and reflecting). Then, they will learn about the interconnectedness of these components of the cycle and how to work through each component through field examples to prepare them for student teaching.

Policies, Practice, and Grading

Course Flexibility and Student Input

This syllabus had been created in collaboration with your high school science methods teacher. One of our goals is to develop cohesion between what you are learning in your methods course and what you will look for and try out in your field experience. However, this course will develop and evolve based on our experiences and needs that might be unique to your field experiences. Therefore, think of this syllabus as a “live” document that can (and most likely will) change to adjust to everyone’s needs. We will unfold the flow and development of our course based on questions, concerns, insights and ideas that you all bring to class. Please share your questions, concerns, and ideas to share so that we can work together to continually revise our plans in ways that will meet our needs as learners and teachers. At the beginning of the course, we will spend time discussing how we can work together to ensure that our course is reflective of our needs, our interests, and the current educational climate. I hope that together we can continue to re-imagine and develop our course.

Active Participation in our Learning Community

During our class sessions, we will engage in discussions, debates, simulations, and other activities. The breadth and depth of our discussions is contingent upon the contributions of each member of our learning community. When a member of our learning community misses class or comes unprepared, the entire group suffers. Therefore, we should all come to class fully prepared (having completed related assignments/readings) and ready to actively participate. Together, we will discuss what active participation can look like and will co-develop our norms. Please contact me in advance if there are any reasons to miss class or come unprepared; again, I want to work with you. When missing a class, you should expect to make up the missed instructional minutes by completing the missed assignments or engaging in alternate activities as assigned by the instructor (at times, viewing a class recording may or may not be possible). Absences or tardiness may result in a lower course grade. Per MSED/TeachEd Policy, missing three class sessions will result in an automatic grade of “incomplete” and you will have to retake the class at another time.

Note: Some texts and class discussions will touch upon deeply personal issues, including cultural practices, gender, mental health, and antisocial/violent acts. I will do my best to provide timely anticipatory warnings, but the nature of our course is that discussions/ events at times take unexpected turns. Further, our class will respond to what we are experiencing in the field and therefore can change rapidly. You are always welcome to step out (or offline) to take care of yourself during these discussions. Let us share responsibility: please indicate to me privately and confidentially if you feel vulnerable around

certain topics. Also, please note that campus resources are available to assist you. Students can find useful resources for safety and security, academic support, and mental and physical health and well-being at the NUhelp website and app. Let us all develop a safe space that allows for respectful free expression and exchange of ideas.

Support for Wellness: Northwestern University is committed to supporting the wellness of our students. Student Affairs has multiple resources to support student wellness and mental health. If you are feeling distressed or overwhelmed, please reach out for help. Students can access confidential resources through the Counseling and Psychological Services (CAPS), Religious and Spiritual Life (RSL) and the Center for Awareness, Response and Education (CARE).

Information regarding COVID-19

As we continue to adjust to what is happening in our world at this moment in time, we will adjust policies and procedures. This course will follow all university guidelines and recommendations and we will continue to respond to and accommodate requirements from your partner school sites. I recognize that there are many challenges and ongoing uncertainty and want to work with you; please always reach out if you need any assistance. If I am not able to solve the problem, I will help connect you with the people or resources that you need.

University Statement Regarding COVID-19 Classroom Expectations

Students, faculty, and staff must comply with University expectations regarding appropriate classroom behavior, including those outlined below and in the [COVID-19 Code of Conduct](#). With respect to classroom procedures, this includes:

- Policies regarding masking and social distancing evolve as the public health situation changes. Students are responsible for understanding and complying with current masking, testing, Symptom Tracking, and social distancing requirements.
- In some classes, masking and/or social distancing may be required as a result of an Americans with Disabilities Act (ADA) accommodation for the instructor or a student in the class even when not generally required on campus. In such cases, the instructor will notify the class.
- No food is allowed inside classrooms. Drinks are permitted, but please keep your face covering on and use a straw.
- Faculty may assign seats in some classes to help facilitate contact tracing in the event that a student tests positive for COVID-19. Students must sit in their assigned seats.

If a student fails to comply with the [COVID-19 Code of Conduct](#) or other University expectations related to COVID-19, the instructor may ask the student to leave the class. The instructor is asked to report the incident to the Office of Community Standards for additional follow-up.

To protect the health of our community, Northwestern University requires unvaccinated students who are in on-campus programs to be tested for COVID-19 twice per week. Students who fail to comply with current or future COVID-19 testing protocols will be referred to the Office of Community standards to face disciplinary action, including escalation up to restriction from campus and suspension.

Exceptions to Class Modality

Class sessions for this course will occur in person. Individual students will not be granted permission to attend remotely except as the result of an Americans with Disabilities Act (ADA) accommodation as determined by AccessibleNU.

Absences: Maintaining the health of the community remains our priority. If you are experiencing any symptoms of COVID do not attend class and update your Symptom Tracker application right away to connect with Northwestern's Case Management Team for guidance on next steps. Also contact the instructor as soon as possible to arrange to complete coursework. Students who experience a personal emergency should contact the instructor as soon as possible to arrange to complete coursework. Should public health recommendations prevent in person class from being held on a given day, the instructor or the university will notify students.

Canvas, Google and Via

Our weekly meetings provide a time and place for us to connect, work collaboratively, and discuss. Through Canvas we will continue this work through discussion questions and space for you to add your insights or thoughts. I will also post detailed reminders through Canvas. Please add checking in on Canvas to your regular routine for the week. You will be using Via to submit key materials related to your field experiences; for example, this site will be how you log practicum hours.

Engaged Observations and Field Notes

By the end of the field experiences, many student teachers report that the field notes were an invaluable tool that helped them notice what was happening in the classroom, develop their own questions, clarify their thinking, and keep a record of ideas/strategies/questions. Your field notes also provide me with a window into your classroom and your thinking. You may find that your field notes will serve as the foundation for many assignments as well as prove useful for other endeavors such as the edTPA and action research. We will discuss how we can regularly share field notes.

Weekly Check-In & Reflection

Before each class, by **8:00 pm Wednesday night**, you will need to submit a “Weekly Update”. We will determine a system for weekly check-ins and reflections. In the past, we have used dialogue journals, google forms, audio messages, and other tools. With all of the unique circumstances this year, we will collaborate to determine what will be helpful and effective. The purpose of this update is to share and reflect with me what you have observed at your teaching location and to ask any questions you may have. This is a private “conversation” between you and me. These updates do not need to be long or any specific format. I will use these updates as formative feedback to make adjustments to the plan for our weekly seminar class. Ideas for questions you can use to put together your Weekly Update. You do not need to answer all of these.

- *What was surprising to you this week during your observation?*
- *What is one success, or positive, experience you observed? What was one challenge you observed – or – what is one concern you have about what you observed?*
- *What is the current topic of study?*
- *What did you do in the field this week? (ie: did you work with a student, did you work with a small group, did you do things for your mentor teacher, did you meet other teachers at the school, etc.)*
- *What questions do you have about your field experience this week?*
- *In what ways can I help you this week?*

Texts and Materials

We will use these two texts that you are using in your methods course:

- National Research Council. 2012. *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13165>.
 - This one will be used in both methods and our course and can be used free online.
- Windschitl, M., Thompson, J., Braaten, M., 2018. *Ambitious Science Teaching*. Cambridge, MA: Harvard Educational Press.

In addition to using these texts, there will be articles, videos and other resources shared in class through Canvas. Please plan to check Canvas regularly for any updates to resources to read or watch in preparation for our course. There are some I have already chosen and added to the syllabus, but based on issues that come up in our class discussions or topics that are shared after field experiences, there may be other resources added.

Some suggested texts:

- Hattie, J. & Yates, G. *Visible Learning and the Science of How we Learn*. New York, NY: Routledge.
- Tomlinson, Carol Ann. *How to Differentiate Instruction in Academically Diverse Classrooms*. Alexandria, VA: ASCD.
- National Research Council. 2014. *Developing Assessments for the Next Generation Science Standards*. Washington, DC: The National Academies Press.
- Westman, L. 2018. *Student-Driven Differentiation*. Thousand Oaks, CA. Corwin.
- Rothstein, D. & Santana, L. 2011. *Make Just One Change*. Cambridge, MA. Harvard Educational Press.

Academic Integrity

Students in this course are required to comply with the policies found in the booklet, "Academic Integrity at Northwestern University: A Basic guide". All work for this course will be submitted electronically via email (rstathakis@northwestern.edu); no need to waste paper! We will also be using shared Google folders. Your written work may be tested for plagiarized content. For details regarding academic integrity at Northwestern or to download the guide, visit: <http://www.northwestern.edu/provost/policies/academic-integrity/index.html>.

While the guidelines for academic integrity at Northwestern prohibit students from submitting similar work in more than one course, these guidelines are modified here. Your courses are all working toward the same goal; providing you, as a teacher scholar, culminating experiences to support synthesis and application of theories and practices. It is likely that as you synthesize and expand your thinking, there will be some overlap between this course, other courses, your action research project and the TPA.

Accommodations for Students

I am committed to ensuring that this class is fully accessible to every member of our learning community. If anything is impeding your success in this class, please see me so that we can work together to find solutions. I believe in differentiation and want to work with you to tailor this course to best meet your needs, readiness, and interests.

Should you anticipate or experience disability-related barriers in the academic setting, please contact AccessibleNU to move forward with the university's established accommodation process (accessiblenu@northwestern.edu; p: 847-467-5530). If you already have established accommodations with AccessibleNU, please let me know as soon as possible, preferably within

the first two weeks of the term, so we can work together to implement your disability accommodations. Disability information, including academic accommodations, is confidential under the Family Educational Rights and Privacy Act.

Grading, Assignments and Assessments

Our course will be a safe place for us to try things out, learn from each other, support each, and grow through activities, readings, discussions and simulations. In order for all of us to benefit and grow, it is important for everyone to attend our classes and to participate regularly. In addition, it is expected that you will complete all course assignments. You are expected to participate regularly in live class discussions as well as online discussions. In your practicum sites, you will observe students and teachers, interview your mentor(s) and at least one student, and take careful field notes during each visit. Components of assessment in this course include: attendance and participation, field notes, mentor evaluation, observations analyses and video analyses.

The assignments for this course are strategically designed to help you learn, reflect, synthesize ideas, challenge your thinking, and engage in authentic educational practice. As you are working on the assignments, the learning objectives and purpose should be clear, relevant, and meaningful. You should be able to understand the practical applications of your work. If this is ever not the case, please see me. Also, note that assignments can be modified to meet your unique needs and interests. Detailed instructions for each assignment will be provided in class and/or through Canvas.

As we will discuss in this course, assessment and evaluation are complex. Many of the texts we will examine make a case for actively engaging students in all steps of evaluation; you will be an active participant in the evaluation and assessment of your own learning in this course.

“Photo Album” Components

As suggested by Tomlinson and McTighe, assessment is best viewed as a photo album instead of a single snapshot. You will work all quarter to fill your album with authentic and relevant tasks; these tasks have been grouped into a few key strands and are aligned with the program’s Guiding Commitments. You will continue to revise and add to these items next quarter in your student teaching seminar.

Practicum & Course Requirements (20 points)

- Weekend Check-ins and Reflections
- Field Notes
- Practicum Agreement
- Weekly Class Preparation
- Practicum Log
- Curriculum Map for Winter Quarter ***DRAFT***
- Practicum Evaluations from Mentors
- Self-Assessment with NU CEF
- Meeting with Dawn at the end of the quarter
- Teacher Performance Assessment Requirements

Learning Communities Portfolio (40 points)

- Design of Learning Environments (Video)
- Mentor Interview and Reflection
- Student Interview
- Maintaining & Caring for the Classroom Community
- Asset Mapping
- Interrogating the Self

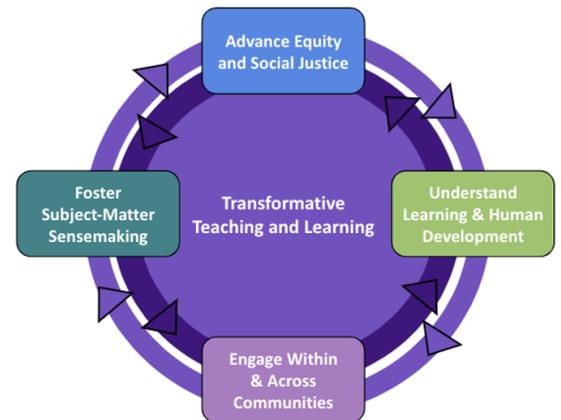
Subject Matter Sensemaking Portfolio (40 points)

- Eliciting & Interpreting Student Thinking (Video)
- Assessment
- Evaluating Lesson Materials
- Universal Design for Learning Task
- Discourse Activity (Video)
- Content-Area Focus (Video)

Northwestern Teacher Education Guiding Commitments

As you will hopefully see and experience, we use the Guiding Commitments as a tool and lens.

- The Northwestern Teacher Education Program’s Guiding Commitments are:
- A statement of values about education for dignity, theories of learning as a social, cognitive, ethical and cultural process, and belief in the power of practices that create culturally sustaining & anti-racist learning environments
- Tools for strengthening our cultural life living through Course, “Discipline”, Program, and Community
- Opportunities to build knowledge, enact practices/ performances, cultivate dispositions



Northwestern Teacher Education Dispositions

 <p>Commitment to Advancing Equity and Justice</p> <ul style="list-style-type: none"> • Engage in self-reflection to understand your own identity, internalized biases, positional privileges, and your impact in any space. • Demonstrate a recognition that teaching grounded in equity and social justice is essential in any setting and in the teaching of all subject matter. • Work to understand how inequity shows up in different settings and take steps to disrupt those patterns. • Identify and strive to address inequities and power relations of systemic racism, sexism, socioeconomic classism, heteronormativity, ableism, and other forms of human oppression. • Cultivate interactions that demonstrably value all students and stakeholders and their ideas. 	<ul style="list-style-type: none"> • Demonstrate a commitment to all students as individuals with unique strengths and experiences; seek to understand and build relationships with all students. • Maintain high expectations for all students; value and prioritize opportunities to advance learning. • Recognize the complexity of teaching and learning. • Demonstrate a strengths-based perspective and actively question and push back on deficit thinking. • Value students' contributions and their diverse ways of knowing and being committed to understanding students' thinking. 	 <p>Reverence for Learners and Learning</p>
 <p>Sense of Professional Responsibility and Commitment to Ongoing Growth</p> <ul style="list-style-type: none"> • Demonstrate self-awareness and self-management. • Engage in self-reflection to understand your own identity, internalized biases, positional privileges, and your impact in any space. • Demonstrate an openness to feedback and integrate feedback into action. • Seek out resources, feedback, and support based on interests and/or needs. • Engage in critical self-reflection and reflection on practice; explain rationale for decisions grounded in research, theory, and lived experience. • Apply feedback and demonstrate a willingness to make changes. • Take action to learn and meet the professional expectations for each context (this includes everything from professional records to attendance to attire). • Meet all legal and ethical requirements 	<ul style="list-style-type: none"> • Seek to build meaningful relationships by understanding, working with, and learning from others. • Value the contributions of families and community members and actively work to meaningfully connect with them. • Seek to understand and build relationships with schools, families, and communities as particular types of intersecting systems within a larger ecosystem that shape our students' lives. • Maintain a focus on recognizing students' strengths, advancing learning (own and others), and finding positive solutions during all interactions. 	 <p>Focus on Collaboration</p>

Note: **For specific short and long term assignments, please see Canvas and use the Checklist you received the first day of class.