

SP22 SCED 480: Science Methods and Curriculum for the Elementary School 202220

Welcome to Science Education 480!

SCED 480: Science Methods and Curriculum for Elementary School

Classroom/laboratory study of theory, curriculum, science content, processes and effective teaching methods in the context of national and Washington State standards

Credits: 5

Note: It is strongly advised that students are prepared to take SCED 480 and SCED 490 in consecutive quarters with the same instructor.

Prerequisites & Notes: Completion of Natural Science GURs, including SCED 201 or permission of instructor; SCED 202, SCED 203, and SCED 204 are highly desired GURs; ELED 370 or ELED 372 or SPED 420.

Instructor:	Whitney Morrison- pronouns she/her/hers	
Meeting Spaces:	<p>Zoom Office Hours:</p> <p>Set up a meeting with me using this link: https://calendly.com/morrisonmeeting/meeting-with-whitney-morrison (Links to an external site.)</p> <p>Office Zoom: https://wwu-edu.zoom.us/my/wamorrisonmeetingroom?pwd=UXZMaGVtb0VvcVRVclUV0xGejd1QT09 (Links to an external site.)</p>	<p>Weekly Meeting :</p> <p>SL230 M/W/F 10-11:50</p> <p>Zoom Meeting (in needed): https://wwu-edu.zoom.us/my/wamorrisonmeetingroom?pwd=UXZMaGVtb0VvcVRVclUV0xGejd1QT09 (Links to an external site.)</p> <p>(Links to an external site.)</p>
Communication :	<p>Do not use Canvas to communicate- Only email please</p> <p>Email: houckw@wwu.edu</p>	

In order to be flexible and responsive to the needs and interests of students and the course, this syllabus and course agenda are subject to change. Changes, if any, will be announced in Canvas Announcements, and assignments will be updated. Students will be held responsible for all changes.

Meeting times/location:

The course is scheduled to meet Monday/Wednesday/Friday 10:00am-11:50am.

Schedule: Here's a snapshot of our [schedule](#)

COVID Safety Information:

Western Washington University will continue the current indoor mask requirement through the first two weeks of the spring term.

Masks will become optional for all individuals inside WWU facilities on the Bellingham campus effective April 11.

- Free COVID testing for students will remain available at the College Hall testing facility on campus. The first two weeks of the quarter will inform testing decisions for the remainder of the quarter, and we will communicate any changes.
- If you test positive for COVID on a home test or through an off-campus testing facility not associated with the university, please notify Western. Students can log into your MyWesternHealth patient portal and send a secure message with your positive test result attached. Employees can send an email to HR.COVID.Assistance@wwu.edu.

Illness including COVID: Some students, even among the vaccinated student population, will test positive for COVID during Spring Quarter and miss class as a result. WWU does NOT hold an expectation that I create a parallel online course to deliver classroom content for any student or students required to self-isolate or be in quarantine. On a case by case basis, I will provide learning materials for ill/quarantining students. If the illness develops further, a more-lengthy absence may be necessary and students should contact the Office of Student: <https://wp.wwu.edu/officeofstudentlife/>

Grading Scheme:

Assignments will be graded, and course grades determined as follows:

Grade	A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F/Z
4-point	4.0	3.9	3.7	3.3	3	2.7	2.3	2	1.7	1.3	1	0.7	0
10-point	10	9.6	9.3	8.9	8.6	8.3	7.9	7.6	7.3	6.9	6.6	6.3	6.3>
100-point	100	96	93	89	86	83	79	76	73	69	66	63	63>

Note: A grade of C- or lower in this course will require you to re-take SCED 490. In addition, you will be asked to meet with your academic advisor for support and to develop an improvement plan.

Course Goals & Objectives:

In this course, prospective teachers (you!) will:

1. Examine your beliefs in relation to a vision of effective science teaching and learning
 - Preservice teachers will analyze how their experiences as a learner have shaped their definition of, attitudes toward, and interest in science
 - Preservice teachers will critically examine their conception of 'effective' science teaching and learning, informed by their experiences as both a learner and teacher of science
2. Deepen your subject matter knowledge for teaching science
 - Preservice teachers will critically examine classroom interactions for evidence of student engagement in the practices of science (ie, 'doing science')

- Preservice teachers will describe elements of the Nature Of Science (NOS), and explain its importance to science instruction
 - Preservice teachers will be able to articulate what students should learn in elementary science, identify big ideas or concepts, and build coherent conceptual storylines
 - 3. Develop an understanding of learners, learning, and issues of diversity and equity in science
 - Preservice teachers will unpack the implicit messages experienced in the educational setting that convey *who* can be a scientist and *how* science is learned
 - Preservice teachers will utilize developmentally appropriate and productive approaches to meet the diverse needs, interests, and abilities of students and create inclusive and equitable science classrooms
 - Preservice teachers will understand the role of place and importance of cultural relevance in science education
 - 4. Develop a beginning repertoire of strategies for science instruction and assessment
 - Preservice teachers will design lessons aligned to the Next Generation Science Standards that reflect principles of effective science teaching and learning
 - Preservice teachers demonstrate appropriate design of assessment for formative and summative purposes
 - 5. Develop the tools and dispositions to study and learn from teaching
 - Preservice teachers will utilize feedback (from peers/instructors /cooperating teachers) to improve their teaching
 - Preservice teachers will apply different lenses (e.g., instructional frameworks, research) to analyze and learn from their science teaching and learning experiences
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Assignments:

Assignments are intended to help you meet specific objectives that align with the course goals listed above. Each assignment will be explained in detail with a rationale and evaluation criteria. Note that in addition to **graded assignments**, you will complete a number of **ungraded assignments** that will act as baseline assessments or that as 'works in

progress' will not be counted towards your final grade. Weighting of individual assignments towards the final course grade are indicated.

- Learning Journal/Reading Responses (30%)
- Foundational Work and Reflections (50%)
- Attendance/Participation and Professionalism (20%)

Course Organization and Requirements:

- Attendance/participation: Unless previously excused, your attendance is mandatory during meetings. If you need to miss a meeting for any reason, please let me know ASAP via email.
- Late Work: due to current circumstances, late work will be accepted but will affect your Participation & Professionalism grade. Please try to stay on schedule with due dates. This will make my grading job more streamlined.
 - You asked for an accommodation before the due date
 - Asked clarifying questions before the due date
 - Can provide evidence for why an error in grading has occurred by going through the revision history of the document to provide a screenshot at the time of submission, showing and justifying that you had all of the required components
- Written assignments must model appropriate grammar, spelling, usage and punctuation. All written work is to be word-processed (double-spaced, 12 point font) unless otherwise specified. Proofread your papers as you would if you were developing a handout for students or parents. The instructor reserves the right to return work for correction prior to grading if there are multiple mistakes in grammar, spelling, and or punctuation.
- Netiquette Statement: Please read about netiquette on this [website](#)
- We will abide by these netiquette rules outlined on this website.
 - In addition to this netiquette statement, we will come up with virtual classroom norms during our first synchronous meeting.

Texts and required materials:

- Readings and supplemental materials will be provided in this Canvas site or made available via the web or Western Libraries.
 - Internet access for various resources and platforms, not limited to: [Zoom](#), [Flipgrid](#), Canvas, [G-Suite Apps](#).
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Syllabus Policies:

This course will adhere to Western's [Syllabi Policies](#) for Academic Honesty, Accommodations, Ethical Conduct with WWU Network and Computing Resources, Equal Opportunity, Student Conduct Code, and Medical Excuse Policy.

Third-Party Software and FERPA: During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these are required assignments, you need not make any personally identifying information available on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname (ensuring the facilitators know how to identify you). Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identifiable/sensitive information. If you have any concerns about this, please contact your instructor. See [FERPA Toolkit](#)

Student Services:

Western encourages students to seek assistance and support at the onset of an illness, difficulty, or crisis. As your instructor, I can be a first point of contact to help you find the campus-based resources you may need. Here are some of the resources WWU offers students:

- In the case of a **medical concern or question**, please contact the Health Center (360) 650-3400 or visit its website: <https://studenthealth.wvu.edu/>
- In the case of an **emotional or psychological concern or question**, please contact the Counseling Center: (360) 650-3400 or visit its website: <http://www.wvu.edu/counseling/>

- In the case of a **safety concern**, please contact the University Police: (360) 650-3555 or visit its website: <http://www.wvu.edu/ps/police/>
- In the case of a **family or personal crisis or emergency**, please contact the Office of Student Life (360) 650-3706 or its website: <https://wp.wvu.edu/officeofstudentlife/>
- In case of need for **academic support** of assignments/writing papers, please contact The Hacherl Writing Center on the second floor of Haggard Hall : <https://library.wvu.edu/rws> (Links to an external site.)