Preparing thoughtful, knowledgeable, and effective educators for a diverse society.

Sec 490: Laboratory/Field Experience in Elementary Science (3 credits)
CRN #***41812***; TRF 12:30-2:20
Face to face class; SMATE 230 on Thursday; and Lowell Elementary Tuesday and Friday

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Please use Don.Burgess@wwu.edu rather than Canvas for speedy communication
Office Hours: 2:30-3:30 Thursday at SMATE; also by appointment

Land Acknowledgement: *We would like to acknowledge that we gather each day on the ancestral homelands of the Coast Salish Peoples, who have lived in the Salish Sea basin, throughout the San Juan Islands and the North Cascades watershed, from time immemorial. Please join us in expressing our deepest respect and gratitude for our Indigenous neighbors, the Lummi Nation and Nooksack Tribe, for their enduring care and protection of our shared lands and waterways.*

Prerequisites: *SCED 490*

Course Description (From Catalog):
SCED 490 is a field-based experience in which WWU students teach science in an elementary classroom. The focus of this course is planning, teaching and assessing elementary science lessons with an authentic audience.

Context:
This fall we will be partnering with the 3rd Grade team at Lowell Elementary to offer six weeks of science instruction. Working in triads, you will co-plan, teach and assess a series of 5-6 face to face lessons for 4-5 students. The first week allows us to prepare our curriculum before we teach lessons delivered on Tuesdays to one group and Fridays to another group. This leaves Thursday for lesson adaption, reflection and professional development.

Course Calendar:
Our detailed course schedule is available here and is subject to revision as the term advances especially as school schedules flex for things like a jog-a-thon.. Below is a general snapshot of the course:

- **Week 1:** Planning
- **Week 2:** Meet and Greet at Lowell Tuesday, planning Thursday, Teach 1 Friday
- **Weeks 2-8:** Teaching Tues/Fri and planning Thursdays
- **Week 9:** Reflection and Presentations
- **Weeks 10:** No class Thanksgiving week

Attendance: Because this course is conducted in a workshop style within a school, your attendance is essential. If you must miss a class, please do your best to inform your instructors as well as your teaching partner prior to any absence.

In-Person Volunteer Guidelines for Bellingham School District: All volunteers serving in-person are required to complete the volunteer application and be on the approved volunteer list.

Syllabi Policies for Students: In this course, we follow the syllabi policies for academic honesty, reasonable accommodation (disability resources and religious), ethical conduct with network and computer resources, equal opportunity, finals, medical excuse and student conduct code.

WWU COVID Recovery Status: Current University safety guidance: Masks are optional in nearly all settings, including inside Western buildings on the Bellingham Campus. This will be monitored for any changes.

WWU Student Support Services: Campus Support Services and Resources and WWU Campus Support Services and Resource Guide

Course Goals: In this course, teacher candidates will:

1. Examine your beliefs in relation to a vision of effective science teaching and learning
    - Articulate a rationale for pedagogical decision-making
2. Deepen your subject matter knowledge for teaching science
    - Develop a learning progression and coherent conceptual storyline
3. Develop an understanding of learners, learning, and issues of diversity and equity in science
    - Design and adapt instruction to meet the individual needs, interests, and ability of students (e.g., cultural relevance, academic language, accommodations)
4. Develop and enact a repertoire of strategies for effective science instruction and assessment:
    - Eliciting and responding to student ideas
    - Engaging students intellectually with relevant phenomena
    - Motivating students to learn/meet learning targets
    - Supporting student sense-making
    - Supporting students in using evidence to critique claims
5. Develop the tools and dispositions to study and learn from teaching
    - Reflect on teaching and student learning

Major Assignments: see canvas for descriptions

- Lesson Preparation/Reflection/Revision
- Teaching/Learning Self Evaluation
- Teaching/Learning Final Presentation
- Written Reflection
- Attendance/Participation/Professionalism

Attendance/participation: Unless previously excused, your attendance is mandatory for teaching days. If you need to miss a meeting for any reason, please let me know ASAP via email.

Late Work: due to the nature of teaching, late work will only make your teaching challenging. Please try to stay on schedule with due dates. This will make teaching more streamlined.

Written assignments: should model appropriate grammar, spelling, usage and punctuation. All written work is to be word-processed. Proofread your papers as you would if you were developing a handout for students or parents.

Equitable Grading: Equitable grading means fair, meaningful grades to students, regardless of students' diverse backgrounds. It reflects students' mastery of knowledge and skills based on measurable and observable course objectives that promote learning.
Equitable grading rests on three pillars: accuracy, bias-resistance, and intrinsic motivation (Feldman, 2019). In this course, grades will accurately reflect your academic level of performance, excluding non-academic criteria such as behavior. We will use mathematically sound calculations and scales, such as the 0–4 instead of the 0–100 scale. Next, I will model how to protect student grades from our own implicit biases by challenging grading practices that sustain institutional biases because they have historically rewarded students with privilege and punished those without. I hope that our grading practices will avoid the pitfalls of using points to reward or punish students as we build more intimate connections with assignments that improve student's learning.

Overall Course Grade: HOLISTIC based on accumulated candidate evidence centered on the course goals tied to the assignment rubrics. *What is the best fit?*

- A = Meets or Exceeds Standard, most, if not all rubric scores fall within the *Proficient to Exceeds* level; teacher candidate is able to provide multiple forms of evidence across the range of course standards; Professional Rubric = minimum *Meets*
- B = Approaching or Meets Standard, most rubric scores fall within the *Developing to Proficient* range; teacher candidate able to provide minimal evidence across most standards; Professional Rubric = minimum *Meets*
- C = Approaching Standard, most, if not all rubric scores fall in *Not Yet, Not observed or Developing* range; teacher candidate provides scattered evidence for some of the standards; Professionalism Rubric may = *Not Yet*
- D = Not Yet close to Standard, most, if not all rubric scores fall in *Unsatisfactory* range or work is incomplete; teacher candidate unable to provide evidence; Professionalism Rubric = *Not Yet*