

University of California, Merced
SYLLABUS: NSED 43/44 and NSED 53/54
Introduction to Teaching Science in Middle School
Introduction to Teaching Math in Middle School
Seminar and Fieldwork
Fall 2019

NSED 43/53-02: Wednesdays 5:30 - 7:20, Classroom Building (COB 1)- 127
NSED 44/54-02: Fieldwork by arrangement

Instructor: Adrienne Nau

Email: anau2@ucmerced.edu

Office Hours: One hour before class and 30 minutes after class. Off-campus office hours will be Tuesday at the STEAM Center from 3:00-4:00. Additional hours are by appointment.

MCS D STEAM Center address: 2900 Green Street

Entrance located off Hawthorne Ave. Parking lot (off 27th St.)

I am on campus on the evening of class only. Appointments can be made to meet me at other times if needed at either location.

Text* *Check your course number. There are two different books.

NSED 43/44

Teaching Science As Inquiry and Investigation– Bass, Contant, Carin (Pearson), **13th Edition**

e-access resources are not needed.

Online resources found on CatCourses

NSED 53/54

Elementary and Middle School Mathematics: Teaching Developmentally – Van De Walle, Karp, and Bay-Williams (Pearson), **10th Edition**, e-access resources are not needed.

How to Ask the Right Questions – Blosser (available as a free PDF download)

Online resources found on CatCourses

Course Description:

The primary objectives of this course are to:

- Provide an introduction to careers in teaching Science and Mathematics at the middle school level
- Improve your skills to better understand and communicate concepts to students

During the course you will learn about effective teaching methods and learning strategies. Teaching Science and Mathematics at the middle school level through an inquiry-based approach will be discussed and you will have the opportunity to plan and implement effective lessons. This course is offered as part of the California Teach (CalTeach) Program. The CalTeach Program, also known as the Science and Math Initiative (SMI) is a UC-wide effort focused on encouraging UC students interested in Science, Math or Engineering to consider teaching in K-12 schools as a career and creating courses and support systems that would help them become great teachers.

Learning Outcomes

Successful completion of the course will ensure that

1. Students will be able to prepare and deliver an inquiry-based lesson

- a. Students will demonstrate their understanding of basic lesson planning by developing a lesson plan.
- b. Students will deliver their prepared lesson in a classroom.
- c. Students will identify different assessment methodologies used by the teacher they are observing in a classroom.
- d. Students will select and use an appropriate assessment method for their lesson.
- e. Students will demonstrate understanding of questioning strategies and levels by creating questions to use in their lesson.

2. Students will develop their own classroom presence

- a. Students will be able to identify different teaching styles, techniques and management strategies while observing in a classroom.
- b. Students will identify the elements of effective class presentations through the development of a rubric.
- c. Students will demonstrate the ability to self assess their presentations using a rubric and completing an evaluative reflective essay.
- d. Students will be able to tutor individual students and to work with groups of students

3. Students will be able to articulate the main aspects comprising a teaching career

- a. Students will be able to explain the requirements for obtaining a teaching credential in the State of California.
 - b. Students will be able to articulate what constitutes the responsibilities, obligations and rights of a teacher
-

Seminar (NSED 43/53)

Seminar Grading

Class attendance and group participation in class – 50%

Assignments – 20%

Tests – 10%

Final Lesson Project – 20%

Seminar reading assignments are due at the beginning of class. No late work accepted except in special circumstances. Instructor must be contacted immediately, prior to due date and time whenever possible.

Attendance

Attendance in this course is essential due to the nature of the coursework. You are expected to be in class, on time each week. 50% of your grade is based on points earned through attendance and participation.* If you need to miss class for any reason, please contact the instructor as soon as possible. You will only be excused from one absence during the semester and will be responsible for the content presented in class.

*Participation is defined as being involved with the activities and discussions during the seminar. Responsible use of electronics for academic use is expected. Cell phones are expected to be put away and silent.

Fieldwork (NSED 44/54)

You are required to complete 30 hours (approximately 3 hours per week) of fieldwork in local schools under the guidance of a mentor teacher. This practicum experience will allow course participants to observe classrooms as well as put the material they learn in the seminar to practical use. The fieldwork will also serve as a supplemental source of topics for lectures and discussions

Fieldwork Grading

The fieldwork grade will be based on the following:

Fieldwork hours (based on 30 hours) – 45%

Fieldwork Reports – 50%

Mentor Teacher Evaluation – 5%

Fieldwork reports are due as scheduled in the course schedule and posted in CatCourse. Late work: Barring special circumstances, all work must be turned in on the due date and submitted through CatCourses.

Assignments submitted late will be penalized as follows:

1-3 days late: 5% deduction (of total points) from earned score*

4-7 days late: 10% deduction (of total points) from earned score*

8-10 days late: 20% deduction (of total points) from earned score*

11-14 days late: 30% deduction (of total points) from earned score*

15-18 days late: 40% deduction (of total points) from earned score*

19-21 days late: 50% deduction (of total points) from earned score*

Work not accepted after 21 days of due date.*

***Work will not be accepted after the end of finals week.**

If there are special circumstances, contact the instructor immediately.

Course Grades (NSED 43/44/53/54) will be assigned as follows:

| | | | |
|-----------|----------------------|-----------|----------------------|
| A+ | 100% | C+ | 77 - < 80% |
| A | 95 - 99% | C | 73 - < 77% |
| A- | 90 - < 95% | C- | 70 - < 73% |
| B+ | 87 - < 90% | D+ | 67 - < 70% |
| B | 83 - < 87% | D | 63 - < 67% |
| B- | 80 - < 83% | D- | 60 - < 63% |
| | | F | < 60% |

Pass/No Pass Option

Students have until the end of the second week of each semester to change the grade option on a course via MyRegistration, accessible through MyUCMerced. After the second week of each semester and up until the last day of instruction for that semester, a student may only change the grade option on a course with the approval of their School dean using the Course Addition/Change form available on the Office of Registrar's website: registrar.ucmerced.edu. Students in good standing who are changing a grade option from a letter grade to a P/NP must conform to the rules guiding the taking of courses on a P/NP basis (see section on Pass/Not Passed).

The grade of P is assigned for a letter grade of C- or better. If the student earned a grade of D+ or below, the grade will be recorded as NP. In both cases, the student's grade will not be computed into the grade point average. Credit for courses taken on a P/NP basis is limited to one-third of the total units taken and passed on the UC Merced campus at the time the degree is awarded.

Academic Integrity

Please refer to the University Policy on academic integrity. It is expected that all work for this course is your own work and that you credit any sources that you may have used. It is also expected that any work turned in for this course has been specifically created for this course. You may not use materials turned in for another course as an assignment for this course.

Accommodations for Students with Disabilities:

The University of California Merced is committed to ensuring equal academic opportunities and inclusion for students with disabilities based on the principles of independent living, accessible universal design and diversity. Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately to discuss his or her specific needs. Also contact Disability Services at (209) 228-7884 as soon as possible to become registered and thereby ensure that such accommodations are implemented in a timely fashion.