

**BIOS 401, CHEM 401, ENVS 401, GEOL 401 and PHYS 401**  
**Biology, Chemistry, Earth and Space Science, Environmental Science, and**  
**Physics Final Clinical Observations and Seminar**

Northern Illinois University

Fall 2017

Monday 5:00 PM – 7:00 PM in Montgomery Hall 443

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**This course meet dates: Aug 28, Sept 11, Sept 25, Oct 9, Oct 23, Nov 6, Nov 27, Dec 11**

(Please plan your schedule accordingly; dates may be subject to change)

**Overview:** As a Secondary Science Educator Licensure candidate, you have been invited to observe in a school setting for the semester leading up to your placement as a student teacher. Assuming that the observation experience and your academic semester go well, you will then be student teaching. Your goal during this semester's observation is to lay the groundwork for a successful student teaching experience by learning as much as you can about your host school's science department and curriculum. Furthermore, you will establish a professional working relationship within the department, and observe various teaching methodologies at work in light of what you have learned and will continue to learn from your coursework here at NIU. You will also teach at least two lessons with the permission of your cooperating teacher and complete a "mini" edTPA. As the final clinical preceding student teaching, the 401 clinical calls on students to move beyond theory to practice.

You are not new to clinical observation and its unique nature. Always remember that you are a guest in the school, that the teachers and administration have agreed to assist you in your professional development, and that you must lay the groundwork for a successful experience. During your initial visit please share this information with school officials so they know what you are required to do throughout the semester. If they have any questions that you are unable to answer, please have them contact me directly.

This course meets in conjunction with the second methods course (BIOS 403, CHEM 495, GEOL 495, ENVS 495, and PHYS 495). As a result many of the issues and ideas that come out of your observations will coincide with discussions in that course. However, while the topics and the nature of the discussions are related, there are *distinct and separate meetings and requirements* for the 401 clinical in order to justify separate credit and to satisfy ISBE standards and requirements for all secondary science educator licensure programs and its program completers. This class will meet for *eight* selected meetings. Although the dates have been set, some adjustments may need to be made once all placements have been secured and the process of observations is underway. As well, you should expect at least one on-site visit by me or your methods 2 instructor to your placement for a joint meeting with your cooperating teacher.

## **Course Goals and Objectives:**

As the third of three NIU courses designed to meet the Illinois State Board of Education's required 100 clock hours of pre-student teaching experiences, the 401 clinical calls on secondary science educator licensure candidates in the Departments of Biological Sciences, Chemistry and Biochemistry, Geology, Environmental Science, and Physics to develop new professional skills as well as to continue growing in terms of previous learning.

### **Candidates in this clinical will:**

1. Continue to demonstrate their understanding of, and begin to apply the central concepts, methods of inquiry, and structure of the discipline as they contribute to the development of meaningful learning experiences.
  - a. Students will become familiar with the school's curriculum and the particular subject matter most likely to be taught in the student teaching semester.
  - b. In consultation with the cooperating teacher, students will develop and present at least two lessons in their discipline.
2. Continue to demonstrate their understanding of the diversity of learning styles and needs as they relate to teacher planning and instruction.
  - a. Students will identify and observe learning and teaching styles in their major field.
  - b. Students will observe how lessons are adapted to meet the needs of all students.
  - c. Students will observe and develop ways to motivate students to learn.
  - d. Students will observe and reflect upon the effectiveness of uses of technology in their major discipline.
3. Identify and apply a variety of strategies for establishing a positive learning environment in the classroom.
  - a. Students will acquaint themselves with the department's/school's general policies and the rules of procedure concerning attendance, cheating, classroom disruptions, etc..
  - b. Students will observe and develop strategies for establishing a positive and productive learning environment. This includes understanding, implementing and maintaining safety in the classroom and laboratory.
  - c. Students will observe and develop classroom management strategies.
4. Continue to maintain Professional Standards.
  - a. Students will communicate professionally with the students and parents, faculty, and staff.
  - b. Students will perform duties promptly and professionally.
  - c. Students will dress professionally.
  - d. Students will establish a professional working relationship with colleagues.
5. Continue to grow in the role of reflective practitioner.
  - a. Students will complete assignments and written reflections on planning and instruction, assessment, academic language and classroom management.

If you need an accommodation for this class, please contact the Disability Resource Center as soon as possible. The DRC coordinates accommodations for students with disabilities. It is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or [drc@niu.edu](mailto:drc@niu.edu).

Also, please contact me privately as soon as possible so we can discuss your accommodations. The sooner you let me know your needs, the sooner I can assist you in achieving your learning goals in this course.

## Requirements:

1. You must observe a class or combination of classes for a minimum of 40 clock hours during the Fall Semester, 2017. I suggest observing more. While you are required to observe classes you should also participate in other school activities (sports and music events, clubs, etc.) whenever possible and familiarize yourself with the school, library/media center, and the guidance office. Also, spend time discussing school policies with teachers and administrative personnel, and any other activity which school officials believe would prepare you for student teaching. For each visit an appropriate time record and activity description must be maintained and submitted. These observation hours must be complete no later than Monday, December 1, 2017. All final 401 time log sheets are due on or before December 4, 2017 as well.
2. You must submit the following documents no later than October 10, 2016.
  - a. Student Teacher Information Sheet: Include your name and Z-ID number, contact information (phone number and email), school placement name and phone number, and all Cooperating Teacher(s') contact information (school phone number and email address). Include a class schedule for when you will be student teaching.
  - b. On a separate sheet(s) of paper, draw a map (print map directions from MapQuest or similar app.) of how to get from NIU to the school. Include information of where the visitor's parking lot is located and where to enter the building.
3. During the course of the semester, you will complete a mini edTPA. There three Tasks. Each task has a unique set of undertakings connected to teaching a learning segment. Instructions will be presented as part of the class meeting sessions.
4. You are required to teach two full lessons in a science class (minimum) for the mini edTPA. Both of these lessons must be video recorded using a digital video camera. This requires a great deal of advance planning on your part and scheduling of your time. Select dates and topics as soon as possible. Both edTPA lessons must be taught and recorded no later than Friday, November 3, 2017, and be submitted no later than Friday, November 10, 2017. Please record on a digital camera and upload it to a flash drive or CD and submit them to me.

I am available to help you in any way that I can with this course, any component of your licensure program and your pre-student teaching preparation.

## Class Schedule

**Focus and Assignments:** The eight seminar meetings will focus on the following topics:

### 8/28 Session 1:

- 401 Expectations
- **Professional Knowledge and Skills Assignment**
- Mini edTPA
- Overview for TASK 1: Context for Learning template Due on 9/11/2017.
- **Additional work on Task 1 components: lesson planning for the learning segment, instructional materials, assessments and the planning commentary template will be due on 9/25/2017.**
- Guidelines for Confidentiality
- Video permissions (due 9/25/2017)
- How to get to know your students
- **Journal Entry 1:** Reflect on the classroom discipline, rules, and management of your cooperating teacher and how you would establish similar or different methods. Also reflect on teacher administrative duties (grade book, attendance, etc.). What are they, how are they done, and what are the complications inherent in them? (due 9/15/2017).

### 9/11 Session 2:

- Short Review of Academic Language.
- **Look Ahead Document**
- Planning for Scientific Understandings/Engaging students in learning.
- Supporting Student Learning in Science
- Planning Assessments to monitor and support student learning
- Start thinking about what lesson you would like to teach for the mini edTPA
- **Journal Entry 2:** Explain what academic language is. Did the cooperating teacher address the academic language demands of the lesson? What would you keep? What would you do differently? Were the needs of all students addressed? If not, how would you do this in the future? (due 9/29/2017)

### 9/25 Session 3:

- Overview of Task 2 template (due 10/27/2017)
- Planning issues
- Video recording issues
- Video permission forms due today
- **Teach and video record 1-2 lessons. Using this video recording, create 2 video clips of no more than 10 minutes each in length. The first clip must illustrate how you facilitated your student's attention to science concepts and data quality while the students are collecting data and recording the data in tables during scientific inquiry. The second clip should illustrate how you actively engaged students in developing understanding of how to use scientific data and concepts to construct and evaluate explanations of a phenomenon. After you teach the lesson administer a formative or summative assessment. The data from this assessment will be used in Task 3.**
- **Journal Entry 3:** Discuss the difficulties that you encountered in planning and scoring the lesson. What might you do differently in your future lesson planning? (due 10/13/2017)
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### 10/9 Session 4:

- Learning Environment
- Engaging Students in Learning
- Deepening Student Learning during Instruction
- **Analyzing Teaching**
- Video recording of the lesson
- Examples of videotaped lessons

- **Journal Entry 4:** Discuss the problems encountered during video recording and how those might be addressed in the future. (due 10/23/2017)

**10/23 Session 5:**

- Analyzing Student work
- Aligning Assessments with Objectives
- Using feedback to Guide Further Learning
- Using Assessment to Inform Instruction
- **Journal entry 5:** Describe effective types of assessment you have observed in the 401 clinical. How were those assessments used to guide further learning? How were they used to inform instruction? (due 11/17/2017)

**11/6 Session 6:**

**11/27 Session 7:**

- Leadership
- Wrap up: Reflections
- Student teaching
- Student Teacher Orientation

**12/11 Session 8: TBD**