This course meets on the following dates: 8/26, 9/9, 9/16, 9/30, 10/14, 11/11 and 11/18

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

Overview: As a Science teacher 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, establish a professional working relationship with the department, and observe the teaching methodology at work in light of what you have learned and continue to learn in your coursework here at NIU. You will also teach at least two lessons with the permission of your cooperating teacher(s) 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 class (BIOS 403, CHEM 495, GEOL 495, 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 401 in order to justify separate credit and to satisfy ISBE standards and requirements for all certification programs and its program completers. This class will meet for seven 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 to your placement and 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, BIOS, CHEM, GEOL and PHYS 401 call on secondary teacher certification candidates in the Department of Biological Sciences, Chemistry and Biochemistry, Geology 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 two inquiry lessons in their discipline.
   c. Students will teach at least 2 inquiry lessons in the classroom.
   d. Students will assess student learning for the learning segments.
   e. Students will identify academic language demands for the inquiry lessons.

2. Continue to demonstrate their understanding of the diversity of student needs as they relate to teacher planning and instruction.
   a. Students will identify and observe teaching styles in their major field.
   b. Students will observe how lessons are adapted to meet the needs of their 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, classroom management, collaboration, professionalism, leadership and advocacy.

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

**8/26 Seminar 1:**
- 401 Expectations
- Professional Teacher Project
- Journal Entries
- Mini edTPA
- Context for Learning
- Video permissions
- Getting started

**Due by 9/16:**
1. TPA: Complete The Context for Learning data sheet on page 37 and 38 of the edTPA handbook for all of the classes that you will be observing this semester:
Due by 9/9:

2. Journal assignment 1: Reflect on the classroom discipline, rules, and management of your cooperating teacher and how you would establish similar or different methods and on teacher administrative duties (grade book, attendance, etc.). What are they, how are they done, and what are the complications inherent in them?
3. Complete Assignment 1 and 3 of the Professional Teacher Project.

**9/9 Seminar 2:**
- Professional Share : Assignment 1, 3 and classroom management.
- Review of Academic Language.

Due by 9/16:

1. Pick one lesson to observe. (Preferably an inquiry lesson) Before the lesson starts sit down and discuss the academic language requirements for the lesson with the cooperating teacher. What should students know before they start the lesson? What new academic language will be included in the lesson? What is the main academic language function (analyze, explain, interpret or justify with evidence) that will be essential for student learning within the central focus of this lesson? How will the lesson be differentiated to address students that may have varied language levels?
   **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?
2. Complete Assignment 2 of the Professional Teacher Project.
3. Hand in all video permission forms.

**9/16 Seminar 3:**
- Professional Share: Academic Language and Assignment 2 -Professional teacher project
- Planning for Scientific Understandings
- Supporting Student Learning in Science
- Planning Assessments to monitor and Support Student Learning

Due by 9/30

1. Select an inquiry learning segment to teach. Create lesson plans for each lesson in the learning segment. Use the lesson plan format from Methods 1 and 2. The segment should include 3-5 lessons.
2. Answer the questions in Task 1 of the edTPA Handbook. **Talk to your cooperating teacher before trying to answer Prompts 2 and 3.**
3. Using the Planning rubrics score your lesson. Rubrics 1-5 on pages 14-18 of the handbook.
4. **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?

**9/30 Seminar 4:**
- Learning Environment
- Engaging Students in Learning
- Deepening Student Learning during Instruction
Due by 10/14
1. **Journal entry 4**: Discuss the problems encountered during videotaping and how those might be addressed in the future.
2. Complete assignments 4 and 5 of the Professional Teacher Project.

Due by 11/11
1. Teach and video tape one lesson in the segment. Using this videotape, create 2 segments 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 or selecting data collected by others and recording it during scientific inquiry**. (Data collected by others should come from large data sets from reputable sources where students have an opportunity to select and explore relationships between different variables. Many such data sets are available on the internet.) 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. The video tape must be submitted to me by 11/4.
2. Watch the video of your teaching and complete the prompts in Task 2.
3. Use the rubric to score your performance.

10/14 Seminar 5: Resume Writing

Due by 10/14:
1. **Complete assignments 6 of The Professional Teacher Project**
2. **Journal Entry 5**: Observe how your instructor differentiates instruction to meet the needs of all of the students in his or her classroom. What strategies seemed to be effective? Explain. What might you add? What would you omit? Explain.

11/4 Seminar 6:
- Professional Share: Videotaping and Assignment 6
- Analyzing Student work
- Aligning Assessment with Objectives
- Using feedback to Guide Further Learning
- Using Assessment to Inform Instruction

Due by 11/18
1. Select 3 student work samples representing what students generally understood from the lesson and what a number of students were still struggling to understand. At least one of the students must have identified learning needs, such as an English language learner or a student with an IEP. Answer the questions in Task 3. (Use the lesson that you taught or the follow up for the lesson when the assessment was completed.) **You may need to have a conversation with your cooperating teacher in order to answer the prompts with depth of understanding.**
2. Use the rubric to score your answers for Task 3.
3. **Journal entry 6**: 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?
11/18 Seminar 7

- Interviewing: Mock interviews.

Requirements:

1. You must observe the class for a **minimum of 40 clock hours**. I would suggest observing more. While you must observe classes you should also participate in other school activities whenever possible, such as familiarizing yourself with the school, library/media center, visiting the guidance office, discussing school policies with 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 2, 2013**.

2. You are required to teach at least two full lessons in a science class. One of these lessons must be recorded **using ONLY 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. The taped lesson **must** be taught and taped no later than **Friday, October 28, 2013** and be submitted **no later than Monday, November 11th, 2013** along with the answers to the prompts in Task 2. **Please record on a digital camera and save as a DVD or on a flash drive. Non-digital recordings will not be accepted.** If you or your school does not have digital recording equipment it may be borrowed for a short period through Dr. Miller.


   1. Your name, contact information, school name, and all CT contact information.
   2. ILAS 401 Experience Time Record Sheets
   3. Course descriptions of the classes you observed and/or will be student teaching (these may be taken from the school catalog).
   4. A written evaluation by the classroom teacher, using the Teaching Observation form, for both lessons you taught. Your teacher may handwrite these, so long as they use our form.
   5. Proof that you have passed the content exam.

We are available to help you in any way that we can with this course, any component of your certification program and your pre-student teaching preparation.