C&I 4203.901
Models of Teaching Science
Spring 2010

Instructor: Dr. Kim Bilica
Office: 1604 Campus, MB 2.228
DT Office Hours: T 4:30 – 5:20p in BV 3.314 | R: noon – 1p in MB 2.228
Office Phone: 458-7438 (phone—voice mail not available) or 265-9108 (iPhone txt & voice)
Email: kimberly.bilica@utsa.edu (preferred contact)

Course description
3 hours credit. Prerequisites: Admission to the Teacher Certification Program, EDP 3203 and EDU 2103. Prior or concurrent enrollment in EDP 4203 is required.

Study of curricular, instructional, and management approaches to subject areas taught in the secondary schools. Emphasis on developing instructional and curricular strategies which are effective in teaching content areas... Restricted course; advisor code required for registration.

Course aims
By the close of this semester, you will be able to
- Plan and enact models of instruction: cooperative jigsaw, 5E, and direct instruction
- Identify personal teaching strengths and areas of challenge
- Develop lessons that meet the needs of diverse learners
- Engage adolescents in science learning that is safe, inquiry-based, developmentally, and scientifically appropriate

Required readings & professional memberships
- Textbook:

  o Other readings for this course will be available on course website – or will be distributed as necessary in class.

- Professional Memberships:
  Science Teachers Association of Texas (STAT)
  http://www.statweb.org/

  National Science Teachers Association (NSTA)
  http://www.nsta.org (Online web site)
    Fee: $32.00 includes 1 science teaching journal (middle or high school level)

  o If you are interested in membership with other science organizations, see 
    http://www.esu.edu/~bbq/scied/sciedorg.html for a list.
Attendance & participation

Attendance and participation are important to success in this course. It is therefore imperative that you be present, timely, and involved in all aspects of the course. Excused absences require valid and verifiable documentation. After the first absence, additional unexcused absences can accumulate in up to 15% loss of course credit.

Attendance will be taken at each class meeting using a sign-in policy. All students are expected to sign in and provide an accurate arrival time. Failure to sign in or failure to provide accurate arrival time may affect grade.

Tardiness (-1 pt per 20 min absent; up to -3 pts per day, max.) and unexcused absences (-3 pts per day up to -15 total, max.) will accumulate and affect overall course grade. Students are expected to sign in by the class start time. When absolutely necessary to leave early, students will also sign out and provide the leave time.

Course assessment

The following outline is a tentative plan for assessment. Final grades are based on a growing mastery of teaching and learning techniques in science. A student’s grades are determined by individual growth and development, not by comparative classroom scores.

Formative Assessment of Progress

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V+</td>
<td>Outstanding; all requirements fulfilled above and beyond expectations</td>
</tr>
<tr>
<td>V</td>
<td>Very good; all requirements fulfilled</td>
</tr>
<tr>
<td>Vn</td>
<td>Good; all basic requirements met, but some targeted improvement possible</td>
</tr>
<tr>
<td>V-</td>
<td>Improvement possible; some requirements unfulfilled</td>
</tr>
<tr>
<td>(-)</td>
<td>Submitted; much improvement possible</td>
</tr>
<tr>
<td>(0)</td>
<td>Not submitted</td>
</tr>
</tbody>
</table>

Summative Assessment of Progress

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>100 – 98%</td>
</tr>
<tr>
<td>A</td>
<td>97 – 94%</td>
</tr>
<tr>
<td>A-</td>
<td>93 – 90%</td>
</tr>
<tr>
<td>B+</td>
<td>89 – 88%</td>
</tr>
<tr>
<td>B</td>
<td>87 – 84%</td>
</tr>
<tr>
<td>B-</td>
<td>83 – 80%</td>
</tr>
<tr>
<td>C</td>
<td>79 – 70%</td>
</tr>
<tr>
<td>D</td>
<td>69% and below</td>
</tr>
</tbody>
</table>

Late Assignment and Resubmit Policy

Graded assignments are due at the beginning of the class meeting time on the date requested. Late assignments will be accepted for up to three days past the assignment due date with 10% grade deflation per day late including weekends (excused absences excluded). An assignment is 1 day late if it arrives after the beginning of the class meeting time.

Some assignments can be revised and resubmitted for a second evaluation for up to one week after assignment has been returned to students. To qualify for the “resubmit” policy, the original assignment must have been (1) turned in by due date/time and (2) written with obvious effort to meet assignment expectations. Exceptions to the resubmit policy include (but are not limited to) assignments that are impossible to revise, such as individual and group performances and final projects, spontaneous in-class assignments, etc. The acceptance and grading policy for a resubmitted assignment is up to the discretion of the instructor.
Procedure for re-evaluations. If you opt to resubmit any graded assignment, please follow this procedure:

1. Keep a copy of the original assignment with all of the instructor’s comments, etc.
2. Be sure to conference with the instructor if you decide to resubmit an assignment BEFORE revision.
3. Resubmit both the marked original and revised versions of the assignment. The instructor may request a special meeting to discuss the resubmission.

Grades are the responsibility of each student. Students are encouraged to discuss matters concerning grades with the instructor as they arise. A final course grade of B or better is required by COEHD policy for fulfillment of standards for certification.

Course assignments (100 course points)

1. **Philosophy of Teaching Science (15% of final grade)**
   Twice during the semester, you will be asked to write a statement on your philosophy of teaching science. The first statement is due during the 2nd class meeting (5 pts). This statement will serve as a baseline for growth over the semester. A revised philosophy will be written at the end of the semester (10 pts).

2. **Field Experience Activities (15% of final grade)**
   Integral to your development as a science teacher, you will participate in a 10-week field experience during which time you will participate in classroom teaching. Some course assignments may be completed during your field experience. You will be expected to share your insights with your peers as well as provide written responses for your instructor. Student teaching can be permitted only after the required field component has been satisfactorily completed.

3. **Peer Micro-teaching (30% of final grade)**
   As we practice models of instruction, you will be asked to participate in two peer microteaching experiences. Peer micro-teach 1 will be a 8-10 minute anticipatory set/warm up/lesson start-up (10 pts). Peer micro-teach 2 will incorporate a 15-20 minute lesson using a model of instruction appropriate to the chosen topic (20 pts).

4. **Portfolio Project (15% of final grade)**
   Additional Information is forthcoming.

5. **Participation & Homework (10% of final grade)**
   Participation includes contributions to discussions, responsibility for readings and assignments, honest and open communication, and use of the course website. In addition, some weekly assignments will count for “participation” value in your final course grade. These assignments are not weighted for points; however, they may have an impact upon your participation credit for the class.

6. **Attendance (15% of final grade)**
   Attendance will be taken at each class meeting. Tardiness and absences can accumulate and affect overall course grade.

Additional information about specific assignment requirements will be presented as the course continues.
UNIVERSITY POLICIES The University expects every student to maintain a high standard of individual integrity for work done. Scholastic dishonesty is a serious offense, which includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another’s work and the unauthorized incorporation of that work in one’s own work), and collusion (the unauthorized collaboration with another person in preparing college work offered for credit). In cases of scholastic dishonesty, the faculty member responsible for the class may initiate disciplinary proceedings against the student. In this class all UTSA procedures will be followed and the necessary paperwork will be filed with the Office of Student life and the College of Education. The course instructor will recommend a penalty to the Office of Student Life, which may impose an additional university penalty.

COLLEGE OF EDUCATION POLICIES AND PROCEDURES Students are expected to demonstrate professional conduct and attire during class sessions (see Fitness to Teach policy document located in the Department website). All cell phones and beepers must be turned off during class periods unless prior permission has been given by the instructor. No electronic recording of lectures or class sessions may be done without the prior permission of the instructor. No eating, drinking, or smoking is allowed in UTSA classrooms and laboratories. (Ad. Memorandum No. 54).

The instructor will follow all the policies and procedures, in regard to students, as they are specified in the UTSA Faculty Handbook and the Fitness to Teach Policy document. Any incidence of scholastic dishonesty or other student discipline issues, will be managed as the Handbook specifies (Faculty Handbook, Section 2.37, pages IV-31-1v1).

UTSA HONOR CODE:
"On my honor, as a student at The University of Texas at San Antonio, I will uphold the highest standards of academic integrity and personal accountability for the advancement of the dignity and the reputation of our university and myself."

Criminal background checks will be conducted on all students enrolled in selected undergraduate courses in the COEHD. Since observation and interaction with minors is required for successful completion for degree programs in the COEHD, students who do not have a clear criminal background check may not be allowed to continue in the programs of the College.

ILT DEPARTMENT MISSION STATEMENT & GOALS
The mission of the department of ILT is to foster the intellectual and professional growth and integrity of students and faculty through critical reflection and dialogue, civic responsibility, and leadership.

The department of ILT will create a context that nurtures interdisciplinary learners who:

- Acquire and demonstrate content and discipline knowledge
- Demonstrate an awareness and acknowledgement of and engagement in research based, reflective, culturally responsive practices
- Are producers, disseminators, and critical consumers of research
- Demonstrate an awareness and acknowledgment of and engagement in social justice and equitable practices
- Articulate their professional philosophy and demonstrate a strong professional identity
ACCOMMODATIONS FOR STUDENTS WITH SPECIAL NEEDS If any member of this class feels that he/she has a disability and needs special accommodations of any nature whatsoever, the instructor will work with you and the Office of Disability Services to perform in this class. Students with disabilities must be registered with the Office of Disability Services located in MS 2.03.18 (Main Campus, 458-4157) or BV 1.302 (Downtown, 458-2838). Please advise the instructor of such disability and the desired accommodations at some point before or immediately after the first scheduled class period.

COURSE POLICIES AND PROCEDURES

Flexibility Clause. The instructor reserves the right to modify or change the assignments, sequence of assignments, or weight of assignments as necessary and as reflected by the needs of individuals or the group during the semester. This course outline represents a tentative listing of information and modifications may be assigned as necessary and appropriate.

“This Syllabus is provided for informational purposes regarding the anticipated course content and schedule of this course. It is based upon the most recent information available on the date of its issuance and is as accurate and complete as possible. I reserve the right to make any changes I deem necessary and/or appropriate. I will make my best efforts to communicate any changes in the syllabus in a timely manner. Students are responsible for being aware of these changes.”