FAIRLEIGH DICKINSON UNIVERSITY

Peter Sammartino School of Education

EDUC 6566: Standard Based Curriculum and Methodology: Secondary Science

Schedule:

Instructor:

Phone:

Fax:

E-mail:

Office and office hours:

(For all introductory information, please see the Blackboard site.)

Course Description:

This course integrates recent research into effective teaching practice in science. Students learn different instructional strategies to enhance the teaching of science with an emphasis on high school and middle school. National and state standards such as the New Jersey Core Content Curriculum Standards will be addressed through curriculum development and assessment.

School of Education Mission Statement

The mission of the School of Education at Fairleigh Dickinson University is to foster a diverse community of effective, professional educators who are caring, competent, reflective, ethical leaders committed to developing scholarship, advancing student learning and achievement, and promoting democratic ideals in our global society.

SOE Claims

We believe our candidates are:

1. Qualified to teach subject matter knowledge.

   We believe that our evidence will show that graduates of our programs understand the central concepts, tools of inquiry, and structure of their certification area and meet the New Jersey licensure requirements (NJPST 1—Subject Matter Knowledge).
2. **Competent in pedagogical knowledge.**

We believe our graduates have acquired the pedagogical skills to meet the needs and differences of individual students through teaching strategies that address individual learning styles, Multiple Intelligences, and differentiate instruction and take into account the developmental levels of their students. (NJPST 2, 3, 4, 5, 6, 7, 8—Pedagogical Knowledge).

3. **Caring**

We believe our graduates have acquired the skills to meet the needs of their students and to promote achievement for all students (NJPST 2, 3, 4, 5, 6, 9, 10, 11).

**Cross-cutting Themes – Technology, Learning to Learn, Multicultural Perspectives**

**Course Objectives**

At the conclusion of the course, students will:

1) Describe, analyze and reflect upon different instructional strategies that can be used to teach science and support the state and national standards.

2) Develop an interdisciplinary or thematic unit plan that can be used to teach science and addresses state and national standards.

3) Develop a philosophy and vision of teaching science that synthesizes the information presented in this course and that is supported from required class readings, research in the field of education, and discussions in the class.

4) Evaluate and compile science materials and resources that can be used in a middle or secondary science classroom which reflect a philosophy of teaching science and address diverse learners and global perspectives.

**Professional Standards**

All teaching candidates must be familiar with and use the Common Core State Standards in English Language Arts & Literacy in History/Social Studies, Science, Technical Subjects, and Mathematics and have a copy of these standards on their computer. They can be found at: [http://www.corestandards.org/](http://www.corestandards.org/). This course supports those standards and the NJ Core Curriculum Content Standards (NJCCCS) that can be found at [http://www.state.nj.us/education/cccs/](http://www.state.nj.us/education/cccs/). This course also supports the New Jersey Professional Standards for Teachers (NJPST) which can be found at: [http://www.state.nj.us/njded/profdev/profstand/standards.pdf](http://www.state.nj.us/njded/profdev/profstand/standards.pdf)
Upon completion of this course, pre-service teachers will demonstrate competencies (knowledge, dispositions, skills, and performances) based on the NJPST. For a complete list of the indicators please refer to: [http://www.state.nj.us/njded/profdev/standards/](http://www.state.nj.us/njded/profdev/standards/)

**Standard #1 (Content):** Teachers shall understand the central concepts, tools of inquiry, structures of the discipline, especially as they relate to the New Jersey Core Curriculum Content Standards (CCCS), and design developmentally appropriate learning experiences making the subject matter accessible and meaningful to all students. [1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9]

**Standard #2 (Human Growth and Development):** Teachers shall understand how children and adolescents develop and learn in a variety of school, family and community contexts and provide opportunities that support their intellectual, social, emotional and physical development. [2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9]

**Standard #3 (Diverse Learners):** Teachers shall understand the practice of culturally responsive teaching. [3.1, 3.2, 3.3, 3.5]

**Standard #4 (Instructional Planning and Strategies):** Teachers shall understand instructional planning, design long and short term plans based upon knowledge of subject matter, students, community, and curriculum goals, and shall employ a variety of developmentally appropriate strategies in order to promote critical thinking, problem solving and the performance skills of all learners. [4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.12]

**Standard #5 (Assessment):** Teachers shall understand and use multiple assessment strategies and interpret results to evaluate and promote student learning and to modify instruction in order to foster the continuous development of students. [5.1, 5.3, 5.7]

**Standard #6 (Learning Environment):** Teachers shall understand individual and group motivation and behavior and shall create a supportive, safe and respectful learning environment that encourages positive social interaction, active engagement in learning and self-motivation. [6.1, 6.2, 6.3, 6.4, 6.7, 6.10, 6.11, 6.12]

**Standard #7 (Special Needs):** Teachers shall adapt and modify instruction to accommodate the special learning needs of all students. [7.1, 7.3, 7.8]

**Standard #8 (Communication):** Teachers shall use knowledge of effective verbal, nonverbal and written communication techniques and the tools of information literacy to foster the use of inquiry, collaboration and supportive interactions. [8.1, 8.2, 8.3, 8.4, 8.5, 8.6, 8.7, 8.8]

**Standard #9 (Collaboration and Partnerships):** Teachers shall build relationships with parents, guardians, families and agencies in the larger community to support students’ learning and well-being. [9.3, 9.4, 9.5]
Standard #10 (Professional Development): Teachers shall participate as active, responsible members of the professional community, engaging in a wide range of reflective practices, pursuing opportunities to grow professionally and establishing collegial relationships to enhance the teaching and learning process. [10.1, 10.2, 10.3, 10.4, 10.5]

Standard #11(Professional Responsibility): Teachers shall act in accordance with legal and ethical responsibilities and shall use integrity and fairness to promote the success of all students

Required texts:


NJDOE. Core Curriculum Content Standards for Science (http://www.state.nj.us/njded/aps/cccs/)

National Science Education Standards http://www.nsta.org/standards

Library Resources

The library currently has a limited collection of middle school and high school text books in the subject areas. They are being held on reserve and must be used in the library. You will need these textbooks for Task #2 (and perhaps for other tasks as well).

Recommended additional/supplemental Readings


Recommended related Websites

- http://www.state.nj.us/njded/cccs/s5_science.htm New Jersey Core Curriculum Content Standards for Science
- http://www.state.nj.us/njded/profdev/profstand/ New Jersey Professional Standards for Teachers and School Leaders
- http://www.nsta.org/ National Science Teachers Association
- www.ascd.org Association for Supervision and Curriculum Development

EDUC 6566: Secondary Science Methods - revised 6/12/2012 r/k
Required Novell and Web Campus (Blackboard) Accounts:

All students in this course are required to obtain an FDU student web mail account in order to access the Blackboard (on-line) components of this course.

In order to access Web Campus, you must have a Web mail account and be officially registered for classes.

If you are having trouble creating your Webmail account or logging in to WebCampus, please contact the Fairleigh Dickinson University Technical Assistance Center (FDUTAC) at 973-443-8822 or email fdutac@fdu.edu. Assistance is available 24 hours a day for WebCampus users.
<table>
<thead>
<tr>
<th>Session/Date</th>
<th>Topic</th>
<th>Readings</th>
<th>Assignment/Performance Task</th>
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<tbody>
<tr>
<td>Session 1</td>
<td>Standards for Professional Practice, Core Curriculum Content Standards: Expectations for course, icon activity, personal school Science history. What is Science?</td>
<td>NJPST Standards, CCCS standards. Gallagher 1,2</td>
<td>Discussion of teaching strategies. How to locate and organize for task #1. Discussion of final anthology</td>
</tr>
<tr>
<td>Session 2</td>
<td>Instructional Strategies: What are strategies used to teach Science? How do they support the NJCCCS? Discussion about portfolios and their value—relate to state and national standards</td>
<td>Gallagher: chapters 3,4, 5</td>
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<tr>
<td>Session 3</td>
<td>Earth science and physics skills. Using technology effectively, Developing effective questioning strategies. Instructional strategies to encourage participation-shared inquiry, Simulation games/problem solving skills</td>
<td>Gallagher: chapter 10, 13</td>
<td></td>
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<tr>
<td>Session 4 and 5</td>
<td>Curriculum, planning, thematic units, Interdisciplinary units: overarching questions/ essential questions; correlation of lessons to NJCCCS.</td>
<td>Gallagher: chapters 11,12</td>
<td>Task #1 due</td>
</tr>
<tr>
<td>Session 6 and 7</td>
<td>Higher order thinking skills/problem solving techniques. Establishing an environment sensitive to multicultural/ multiethnic concerns</td>
<td>Gallagher: chapters 7, 8</td>
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<tr>
<td>Session 8 and 9</td>
<td>Presentation of thematic units</td>
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<td>Task #3 due</td>
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<tr>
<td>Session 10</td>
<td>Evaluation of science textbooks and materials; Examining different resources available online.</td>
<td>Gallagher: chapter 9</td>
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<tr>
<td>Session 11</td>
<td>Structuring the classroom to accommodate students with learning disabilities and 504 plans. Legal implications of IEP/504 plans</td>
<td>Gallagher: chapter 6, 14</td>
<td>Task #2 Due</td>
</tr>
<tr>
<td>Session 13</td>
<td>Chemistry and biology. Implementation of curriculum. Testing of science skills, traditional and alternative assessments</td>
<td>Gallagher: chapters 11, 12 (review both)</td>
<td>Assignment #4 due</td>
</tr>
<tr>
<td>Session 14</td>
<td>Synthesis: Expectations, discipline, management issues, vision, student-centered classroom facilitation</td>
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<td>All tasks compiled into portfolio with reflections due.</td>
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<td>Session 15</td>
<td>Open forum: vision for the future</td>
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### Assignments/Performance Tasks

| Task 1 | Instructional Strategies Anthology | Collection of strategies observed, discussed, and demonstrated. Each strategy needs a description, a reflection on its value, an example of how it can be used to teach science, and how it addresses state and national standards. A minimum of 5 strategies should be included with at least 3 which specifically address students with special needs. | 25 points |
| Task 2 | Evaluation of science materials and resources | Students will evaluate various resources including on-line websites, textbooks, and trade books. These resources will be complied into a list. Students will reflect on how materials can be used with diverse learners and will locate resources that are designed especially for such learners. Each resource should have a reflective statement explaining how it supports or does not support your philosophy of teaching or how it addresses diverse learners and a global perspective and/or content standards. | 20 points |
| Task 3 | Unit plan | Interdisciplinary or thematic unit plan in the sciences. This plan may be developed by collaborative groups and presented to the class. The plan includes a series of specific lessons and related assignments, rubrics, evidence that the NJCCCS are addressed, evidence of attention to the needs of diverse learners and the developmental levels of students, engaging students in active learning and performance based assessments. One of these lessons will be taught to the class. Class will provide specific and immediate feedback to the presenting group. | 20 points |
| Task 4 | Philosophy and Vision of Teaching Science | This formal paper should state a clear philosophy and vision of the sciences and how it is an important component of the academic development of all children; your thesis or argument should be supported by the required class readings, research in the field, and discussions. The purpose of this paper is for you to synthesize the information presented in this course and for you to develop your own vision for the teaching of science. | 20 points |
| Attendance and Participation | • Attendance and active participation • Online participation when required • Turning in all work on time | | 15 points |

### Grading and Evaluation Policies

Your total number of points will be converted into the following grade:


Any grade below C is considered unacceptable in graduate programs and considered failing.
Rubric – Task #1: Instructional Strategies Antholog

Student discusses each of the 5 (or more) instructional strategies in terms of:

- Engaging and supporting students in learning
- Making subject matter comprehensible to students
- Assessing student learning
- Planning instruction and designing learning experiences for students

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Exceptional</th>
<th>Proficient</th>
<th>Basic</th>
<th>Novice</th>
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<td></td>
<td>The response provides evidence that clearly, consistently, and convincingly demonstrates the candidate’s ability to understand and use a variety of instructional strategies which will enhance the students’ learning of the content material. Diverse learners and students with special needs are considered. (5 points each)</td>
<td>The response provides evidence that clearly demonstrates the candidate’s ability to understand the connection between information about a class and designing developmentally appropriate activities. The preponderance of evidence provided is appropriate, relevant, or accurate. Candidate considers diverse learners and students with special needs. (3-4 points each)</td>
<td>The response provides evidence that partially demonstrates the candidate’s ability to select and use appropriate instructional strategies. The preponderance of evidence is minimal, limited in scope, cursory, inconsistent, and/or ambiguous. The candidate rarely addresses the needs of diverse learners or students with special needs. (2 points each)</td>
<td>The response provides little or no evidence of the candidate’s ability to understand the connection between instructional strategies and the needs of the students in the classroom. Little or no attention is paid to diverse learners or students with special needs. Evidence provided is inappropriate, irrelevant, inaccurate, or missing. (0-1 point each)</td>
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1.                                                                 |
2.                                                                 |
3.                                                                 |
4.                                                                 |
5.                                                                 |
(6)                                                                |
(7+)                                                                |

Make sure to cite your sources and resources.
**Rubric: Task #2 – Evaluation of Materials and Resources**

For each resource you evaluate discuss the following (as appropriate). You may (and should discuss any other issues you feel are relevant to evaluation of the resource. Make sure in each case to cite the resource you are evaluating.

*The student has included:*

- **Introductory information**
  - Quality of material presented
  - References to technology
  - Health and safety (when appropriate)
  - Global Awareness and Environmental Responsibility
  - Level of material investigated
  - Instructional and assessment strategies (for students with special needs, ELL, and diverse learners)
  - Bias
  - Correlation to the NJCCCS and other national standards
  - Age and level appropriateness of resources
  - Suitability for teacher use

<table>
<thead>
<tr>
<th>Resources (min. 5 required)</th>
<th>Points (4 per resource)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>1.</td>
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<td>(7 +)</td>
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EDUC 6566: Secondary Science Methods - revised 6/12/2012 r/k
Task 3: Unit Plan and Presentation

Note: These are Waypoint Rubrics. 1 is high and 4 is low. For your grade, the values will be inverted.

Unit Plan – for each lesson and for the overall unit

1 NJCCCS Competent in pedagogical knowledge and skills Wt (8.0%) Performance

1 The lesson is correlated to the NJCCCS and specific indicators, both of which are clearly written out.

2 The NJCCCS is mentioned in number only and it is not clear what standards are being referenced.

3 The NJCCCS mentioned do not clearly relate to the lesson.

4 No NJCCC are mentioned.

2 Learning Objectives Competent in pedagogical knowledge and skills Wt (12.0%) Performance

1 The learning objectives are written in measurable, observable terms, and are written in correct grammatical form.

2 The learning objectives are written in measurable terms.

3 The learning objectives are not written correctly and need to be revised.

4 The learning objectives are not written in measurable terms and/or do not relate to the lesson being taught.

3 The Procedure: Instructional Activities Competent in pedagogical knowledge and skills Wt (16.0%) Performance

1 The Procedure is detailed, thorough, carefully thought out, and clearly describes the step-by-step process the teacher will go through to address the objectives(s).

2 The Procedure is describes a step-by-step process the teacher will go through to address the objectives(s).

3 The Procedure is very basic and needs more detail on teaching strategies and content taught.

4 The Procedure is brief, incomplete, and not well thought out. It does not adequately address the learning objectives.

4 The Procedure: Engagement of Students Competent in pedagogical knowledge and skills Wt (16.0%) Performance

1 The Procedure actively engages the students in worthwhile and valuable activities that are clearly described in detail.

2 The Procedure engages students in the learning process

3 The Procedure attempts to engage students but is not well defined or explained.
4 The Procedure does not engage students in the learning process.

5 Content Qualified to teach subject matter Wt (16.0%) Performance

1 The lesson contains in-depth and solid knowledge of the content and reflects accurate information about the topic.

2 The lesson contains adequate knowledge of the content and reflects accurate information about the topic.

3 The Procedure contains some content but needs to be further developed.

4 The lesson does not contain sufficient content.

6 The Evaluation Plan Competent in pedagogical knowledge and skills Wt (16.0%) Performance

1 The evaluation plan is aligned with the objective(s), is detailed, and clearly specifies what data will be collected. A rubric/criteria sheet is included.

2 The evaluation plan is aligned with the objective(s).

3 The evaluation plan is not not well developed and needs more detail. It is somewhat aligned with the objectives.

4 The evaluation plan is not aligned with the objective(s).

7 Reflection Learning to Learn Wt (16.0%) Performance

1 An in-depth reflective statement is included on how this lesson: 1) will help me as a future teacher: what were the benefits/detriments of developing this lesson? 2) addresses one (or two) of the NJPST and a rationale as to why this assignment addresses this standard.

2 A short reflective statement is included on how this lesson: 1) will help me as a future teacher: what were the benefits/detriments of developing this lesson? 2) addresses one (or two) of the NJPST and a rationale as to why this assignment addresses this standard.

3 A short, brief reflection is included.

4 A reflection is not included.
Rubric for Presentation (Waypoint Rubric)

1 Opening of Presentation Multiple Wt (14.3%) Performance

1 Has a clear and interesting opening that grabs your attention
2 Has an clear opening that addresses topic
3 The opening is not well defined.
4 There is no clear opening of the presentation

2 Focus of Presentation Multiple Wt (14.3%) Performance

1 Maintains clear focus on a central idea or topic
2 Conveys central idea or topic
3 Attempts to focus on a central idea or topic
4 Has little or no focus on central idea or topic

3 Details of Presentation Multiple Wt (14.3%) Performance

1 Elaborates details to support central idea
2 Provides sufficient details; may have some elaboration
3 Lists related details but provides no elaboration
4 Offers insufficient or unrelated details

4 Conclusion of Presentation Multiple Wt (14.3%) Performance

1 Includes a clearly stated conclusion that is linked to the central idea or topic; it clearly wraps up the presentation.
2 Includes a conclusion that is linked to the central idea or topic.
3 Attempts to form a conclusion but it is not clearly linked to the central idea or topic
4 There is not a clear conclusion to the presentation

5 Word Choice for Presentation Multiple Wt (14.3%) Performance
1 Uses varied and interesting word choice and sentence structure
2 Uses varied word choice and sentence structure
3 Has little varied word choice and sentence structure
4 Does not use varied word choice or sentence structure

6 Eye Contact for Presentation Multiple Wt (14.3%) Performance
1 Clearly attends to audience through good eye contact and gestures
2 Attends to audience through eye contact and gestures
3 Exhibits some awareness of audience through minimal eye contact or gestures
4 Exhibits no eye contact with audience

7 Pacing and Intonation for Presentation Multiple Wt (14.3%) Performance
1 Speaks audibly with expression; uses pacing and intonation very effectively
2 Speaks audibly with expression; uses pacing and intonation
3 Speaks too softly or loudly with little or no expression; attempts to use pacing and intonation
4 Speaks too softly or loudly with little or no expression; does not use pacing or intonation effectively
## Task 4: Philosophy and Vision of Teaching Your Content Area

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Performance Level: Superior (4 points)</th>
<th>Performance Level: Adequate (2-3 points)</th>
<th>Performance Level: Needs improvement (0-1 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Theoretical foundation</strong></td>
<td>Correctly articulates the meaning and relevance of several theoretical foundations</td>
<td>Description of theoretical foundation(s) is/are limited</td>
<td>Fails to articulate any theoretical foundation.</td>
</tr>
<tr>
<td><strong>Relevant practical examples</strong></td>
<td>Provides numerous examples of how theory is represented in practice and articulates well the connection</td>
<td>Provides a some examples of how theory is represented in practice</td>
<td>Provides examples that are not relevant or does not provide examples</td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td>Writing is indicative of a reflective practitioner</td>
<td>Writing is indicative of a novice’s attempt at reflection</td>
<td>Mere statement of opinion without reflection</td>
</tr>
<tr>
<td><strong>Writing style</strong></td>
<td>There is precision and sophistication in syntax. Few if any errors in sentence construction.</td>
<td>Some variety in type and structure and length of sentences with few errors.</td>
<td>Little variety in sentence structure. Errors which interfere with message being conveyed.</td>
</tr>
<tr>
<td><strong>Mechanics</strong></td>
<td>Few, if any, errors in spelling, capitalization, punctuation, and grammar.</td>
<td>Fewer than 5 errors in spelling, capitalization, punctuation, and grammar.</td>
<td>More than 5 errors in spelling, capitalization, punctuation, and grammar.</td>
</tr>
</tbody>
</table>
FDU School of Education Policy Reference

1. Mission: The mission of the School of Education at Fairleigh Dickinson University is to foster a diverse community of effective, professional educators who are caring, competent, reflective, ethical leaders committed to developing scholarship, advancing student learning and achievement, and promoting democratic ideals in our global society.

2. Attendance: Students are required to attend class, arrive on time and participate in all courses for which they are enrolled. Class attendance and participation are essential to academic progress. Individual instructors may include class participation in the determination of the final grade. Each instructor will announce his or her grading policies at the beginning of the semester in each course, making clear the weight to be given to participation in grade determination. (FDU policy). The School of Education’s Policy Committee suggests the following for graduate classes which meet for 15 sessions:
   a. Attendance is required in all our classes
   b. 3 absences, grade drops by a half a grade
   c. 4 absences, grade drops by one full grade
   d. 5 absences, the student fails or withdraws from the class

3. FDU Academic Integrity Policy


   Students enrolled at Fairleigh Dickinson University are expected to maintain the highest standards of academic honesty. Students have the responsibility to each other to make known the existence of academic dishonesty to their course instructor, and then, if necessary, the department chairperson or the academic dean of their College. Course instructors have the added responsibility to state in advance in their syllabi any special policies and procedures concerning examinations and other academic exercises specific to their courses. Students should request this information if not distributed by the instructor.

   Academic dishonesty includes, but is not necessarily limited to, the following:

   1. Cheating—Giving or receiving unauthorized assistance in any academic exercise or examination. Using or attempting to use any unauthorized materials, information or study aids in an examination or academic exercise.

   2. Plagiarism—Representing the ideas or language of others as one’s own.

   3. Falsification—Falsifying or inventing any information, data or citation in an academic exercise.

   4. Multiple Submission—Submitting substantial portions of any academic exercise more than once for credit without the prior authorization and approval of the current instructor.

   5. Complicity—Facilitating any of the above actions or performing work that another student then presents as his or her assignment.
6. Interference—Interfering with the ability of a student to perform his or her assignments.

Sanctions: Any student found guilty of academic dishonesty will, for the first offense, receive one or a combination of the following penalties:

1. No Credit (0) or Failure for the academic exercise.
2. Reduced grade for the course.
3. A Failure in the course that is identified on the student’s permanent record card as permanent and cannot be removed.
4. Recommendation for academic probation to the Dean’s Office. In cases of interference and complicity, when the student is not registered in the affected course, the incident may be recorded on the student’s permanent record card. In any case, the incident and penalty will be recorded in the student’s file maintained in the campus Office of Enrollment Services. For a second offense of academic dishonesty, a student will be subject to any combination of the above sanctions and, with concurrence of the academic dean, one of the following:

1. Suspension from the University for one year. Readmission will be contingent upon the approval of the academic dean.
2. Dismissal from the University.

4. Graduate Programs – Grading & similar policies
(based on a draft presented to the School of Education’s Policy Committee by Dean Al Schielke on 10/15/03)

1. Grades (The instructor should specify his or her grading scale to equate points/percentages into letter grades.):
   a. Weighted grades: A, A-, B+, B, B-, C+, C, and F. (Grades of C- or D are not acceptable grades in graduate programs.) The minimum passing grade for the graduate programs is a C.
   b. Incompletes (not a grade but a temporary status): STUDENTS HAVE THE RESPONSIBILITY TO COMPLETE ALL WORK IN A COURSE IN THE PRESCRIBED TERM. A student has the added responsibility to notify the course instructor of circumstances that will prevent the student from completing the required coursework on time. An incomplete should be given only in exceptional or emergency circumstances at the discretion of, and after consultation with, the instructor. The students will have through the third week of the next full semester (fall or spring) to complete the requirement for the course or the incomplete automatically will change to a failure. If appropriate, the instructor can request an extension of the incomplete, which requires the approval of the school director and the college dean.
   c. Change of Letter Grades: “No instructor shall change a grade from one letter grade to another based upon submission by the student of additional work unless the same opportunity has been made to all other students in the class.” A change of grade is always legitimate and appropriate when the recorded grade is the result of an error by any university employee.

2. Repeat Courses: If a graduate student repeats a course, both grades remain on the transcript and are averaged in the cumulative grade-point-ratio (GPA). The student will earn credit for one course.
3. Degree Requirements and Academic Probation
   a. The School of Education requires a minimum grade-point-ratio of 2.75 (3.25 for the MA in Learning Disabilities) for graduation.
   b. Students who receive two or more grades of C in graduate coursework will be warned, and if they do not demonstrate improvement in their academic performance they will be asked to withdraw.
   c. Retention in the MAT program is contingent on maintaining a minimum grade-point-ratio of 3.00 (3.25 for the MA in Learning Disabilities).
   d. A graduate program of study must be completed within a period of five years from the time the student first registers for graduate study.

5. Undergraduate Programs – Grading & similar policies
   1. Grades
      a. Weighted grades: A, A-, B+, B, B-, C+, C, C-, D, and F. The minimum passing grade for the undergraduate programs is a D.
      b. Incompletes (not a grade but a temporary status): STUDENTS HAVE THE RESPONSIBILITY TO COMPLETE ALL WORK IN A COURSE IN THE PRESCRIBED TERM. A student has the added responsibility to notify the course instructor of circumstances that will prevent the student from completing the required coursework on time. An incomplete should be given only in exceptional or emergency circumstances at the discretion of, and after consultation with, the instructor. The students will have through the third week of the next full semester (fall or spring) to complete the requirement for the course or the incomplete automatically will change to a failure. If appropriate, the instructor can request an extension of the incomplete, which requires the approval of the school director and the college dean.
      c. Change of Letter Grades: “No instructor shall change a grade from one letter grade to another based upon submission by the student of additional work unless the same opportunity has been made to all other students in the class.” A change of grade is always legitimate and appropriate when the recorded grade is the result of an error by any university employee.
   2. Repeated Courses: If an undergraduate student repeats a course, both grades remain on the transcript but only the last earned grade will be computed in the cumulative grade-point ratio. The student will earn the credit associated with the grade received in the last repeated course.
   3. Degree Requirements and Academic Probation
      a. In general, a student must earn a minimum 2.00 GPR (GPA) for graduation. The School of Education, however, requires a minimum undergraduate grade-point-ratio of 3.00 for acceptance and retention in the QUEST program. If a full-time student’s semester GPR (or part-time student in blocks of twelve credits) is between 2.75 and 3.00, the student will be continued in the QUEST program for one additional semester. Students will not be retained in the QUEST program if their CGPR falls below 2.75.
      b. QUEST students who receive two or more grades of C in MAT courses will be placed on probation. If they do not demonstrate improvement in their MAT coursework they will be removed from the program.
      c. An undergraduate program of study must be completed within a period of ten years.
6. **Student Academic Services:** The University attempts to meet the needs of all students with special needs. The Office of the Dean of Students coordinates, through appropriate campus offices, services that would provide reasonable accommodations for students with special needs. If special accommodations are required, contact the dean of students as early in the semester as possible to that appropriate arrangements can be made.

7. **Policy on course completion:** In order to maintain matriculation status, students must register consecutively for the fall and spring semesters. If consecutive registration is not maintained, students must reapply to the Admissions Office. A leave of absence allows students to interrupt their graduate studies if necessary. Please see the Student Handbook for specific details.

8. **Student responsibilities regarding fulfilling course requirements** *(the following represents the MAT committee’s policy regarding student responsibility in fulfilling course requirements)*:

It is expected that students enrolled in courses and programs in the FDU School of Education take a proactive stance in assuring that they meet the requirements to fulfill all courses necessary for certification and/or their respective program in the correct sequence and in a timely fashion. This means that it is the student’s responsibility to meet regularly with his or her advisor, to line up a sequence of courses and a time frame for completion, to make sure that all check sheets are updated regularly and are current, and to make sure that all documentation such as resumes, transcripts, and Praxis reports are on file. While the School of Education faculty will make every effort to smooth the path for students and keep accurate records, it is ultimately the responsibility of the student to ensure that he or she has completed the necessary paperwork and courses for certification and/or graduation.

9. **Picking up graded papers:** Students are requested to pick up all of their papers from their professors (or the School of Education main offices at each campus) within the first 3 weeks of the new semester. All work not retrieved by the end of these 3 weeks will be discarded.

**Appendix A – FDU Lesson Plan Format**

Daily instructional planning should demonstrate the pre-service teacher's: knowledge of subject matter (content); understanding of the learning process, and the developmental and diverse needs of students; and ability to use a variety of effective teaching and assessment methods, and design appropriate activities that will engage ALL students and optimize their learning. Lesson plans must include the basic elements described below.

EDUC 6566: Secondary Science Methods - revised 6/12/2012 r/k
I. Educational Objectives (including the NJCCCS and other appropriate standards) [What each student is expected to learn, written in measurable terms.]

Example: Each student will demonstrate, explain, describe, write...etc. “Each student will write, from memory, the Preamble to the Constitution. Then each student will explain, orally or in writing, what the Preamble means to him/her.”

II. Instructional Materials & Resources

B. What will you need to prepare your lesson?

B. What will you need to use during the lesson?

2. In-class

2. Library/media center
3. Technology
4. Community resources

C. Vocabulary: What vocabulary will you need for the lesson? Do you need to teach this vocabulary?

III. Procedures [Instructional strategies & learning activities]

C. Anticipatory Set [Motivating or focusing activity.]

3. Introduction to lesson, its purpose and objectives
4. Connection to previous lesson or other activities
5. Determine prior knowledge (What/how much do students know about the topic? Are they ready to move on from previous lesson? Are all students ready for this lesson?)
6. Motivational activity

B. Body of the Lesson

2. Sequential, step-by-step implementation of learning activities. Number or bullet these steps.
3. Incorporate strategies for special needs students and second language learners. Specify the accommodations and/or differentiation.
4. Address issues of diversity both in the lesson content and for the student body in the class

IV. Closure & Extension [Summarizing Activity]

D. Re-cap of lesson and summary of what was learned with active student participation (discussion, Q&A, group summaries, etc.)
E. Homework assignments for extension of learning activities and reinforcement.

V. Assessment/Evaluation [how well did ALL the students learn what was intended?]
E. What assessment strategies/methods will you use to measure how well all students achieved the educational objectives of the lesson (observations, quiz, presentation, etc.)?

F. Did they meet/exceed the educational objectives? How will you evaluate how well each student learned (rubric, observation checksheets, rating scales, numeric/letter grades)?

VI. Feedback/Reflection [Evaluate your performance based on feedback from your Cooperating Teacher, students, and personal reflection] note: this area is required for all field work. It is required for class assignments only when specified.

F. What went well with the lesson?
G. Do any students need review or special help?
H. How can I improve this lesson?