COURSE SYLLABUS

<table>
<thead>
<tr>
<th>Course Number: MAE 2920</th>
<th>Course Title: Professional Development II</th>
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</thead>
<tbody>
<tr>
<td>Prerequisite(s):</td>
<td>Course Hours: Wednesday 12:20 – 1:10</td>
</tr>
<tr>
<td>Course Credit: 1 Hour</td>
<td>Required Text(s):</td>
</tr>
<tr>
<td>College: Arts &amp; Sciences</td>
<td>Supplies:</td>
</tr>
<tr>
<td>Department: Mathematics</td>
<td>Faculty Name: Dr. Rebekah M. Lane</td>
</tr>
<tr>
<td>College: Mathematics</td>
<td>Term and Year: Spring 2010</td>
</tr>
<tr>
<td>Office Location: 302 Jackson – Davis Hall</td>
<td>Place and Time: Jackson – Davis Hall / Room 408</td>
</tr>
<tr>
<td>Office Hours</td>
<td>Telephone: 850-561-2153</td>
</tr>
<tr>
<td>Monday 1:30 – 2:30</td>
<td>e-mail: <a href="mailto:rebekah.lane@famu.edu">rebekah.lane@famu.edu</a></td>
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<tr>
<td>Tuesday</td>
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<td>Wednesday 1:30 – 2:30</td>
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<td>Thursday</td>
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<td>Friday 1:30 – 2:30</td>
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<td>Saturday</td>
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**Course Description**

This course is designed to acquaint each student with the National Standards for Evaluation in Secondary Schools and how to apply these standards in the classroom. It is to be understood that evaluation discussed in this course is designed, not for the purpose of grading students, or determining the level of performance of the teacher, but it is strictly for the purpose of improving teaching and learning.

**Conceptual Framework**

The Conceptual Framework in the Professional Education Unit (PEU) at Florida A&M University is an integrated approach to providing educational experiences that result in exemplary professional educators. The Framework is comprised of six themes with the mission of developing high quality classroom teachers, administrators and support personnel. The term “exemplary” refers to the kind of graduates the PEU strives to produce. The figure below provides a diagram of the Exemplary Professional Conceptual Framework.

The Conceptual Framework for the FAMU Professional Education Unit is grounded in a combination of directed, constructivist, developmental, and social learning theories derived from the writings of system theorists, educational philosophers, social scientists, practitioner and developmental theorists. Concepts from these writers and from the varied educational learned societies help form the knowledge base for the unit’s curriculum components and principles of its Conceptual Framework.

F=Florida Educator Accomplished Practices Standards (FEAPS)
I=Interstate New Teacher Assessment and Support Consortium Standards (INTASC)

(K)=Knowledge   (S)=Skill   (D)=Disposition

Approved/Revised 10/30/07
VALUES

•CF3
•Through this focal area, the FAMU professional education candidate will:

<table>
<thead>
<tr>
<th></th>
<th>Be committed to individual excellence.</th>
<th>F: 3.9</th>
<th>I: 5.9</th>
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</thead>
<tbody>
<tr>
<td>CF: 3.4(D)</td>
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<tr>
<td>CF: 3.5(D)</td>
<td>Recognize the importance of peer</td>
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<td></td>
<td>Relationships in establishing a climate for learning.</td>
<td>F: 7.2</td>
<td>I: 5.10</td>
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CRITICAL THINKING

• CF4

Through this focal area, the FAMU professional education candidate will:

| CF: 4.1 (K) | Understand a variety of instructional/professional strategies to encourage student development of critical thinking and performance. | F:4,7 | I: 4 |
| CF: 4.2 (S) | Use a variety of instructional/professional strategies to encourage students’ development of critical thinking and performance. | F:2,7 | I: 4 |
| CF: 4.3 (D) | Value critical thinking and self-directed learning as habits of mind. | F: 4 | I: 1,4 |
| CF: 4.4 (K) | Acquire performance assessment techniques and strategies that measure higher order thinking skills of student. | F:1,4 | I: 1,8 |
| CF: 4.5 (S) | Demonstrate the use of higher order thinking skills. | F: 8 | I: 4 |

PROFESSIONALISM

• CF 5

Through this focal area, the FAMU professional education candidate will:

| CF: 5.1 (K) | Know the content | F: 8 | I: 1 |
| CF: 5.2 (S) | Use the appropriate pedagogy to provide all students with the opportunity to learn. | F:7,9 | I: 7 |
| CF: 5.5 (S) | Construct learning opportunities that support student development & acquisition of knowledge & motivation. | F: 7 | I: 5 |
| CF: 5.7 (S,D) | Display appropriate code of conduct including dress, language, and respective behavior. | F: 9 | I:5,9 |

Overall Goals of the Course

The overall goal of the course is to help the student understand how to apply each standard in the classroom and how each standard adds to effective teaching and learning.

Specific Behavioral Objectives

At the end of this course each students is expected to meet the following objectives with at least 70% proficiency. The student will:

1. Be familiar with the eight (8) standards of Evaluation of the Teaching of Mathematics.
2. Understand the cyclic process of evaluation.
3. Know how to benefit from deliberation with colleagues and supervisors about teaching.
4. Use evaluation to determine opportunities for the teacher to analyze his/her own teaching.

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5. Demonstrate an understanding of the importance of drawing information from a variety of sources to be used as a means of evaluation.
6. Expand the Teacher Portfolio.
7. Be able to assess the teaching of mathematical concepts, procedures, and connections.
8. Be able to make an assessment of mathematics as a process involving problem solving, reasoning, and communication.
9. Be able to foster a positive mathematical disposition in students.
10. Understand means by which a teacher assesses students’ understanding of mathematics.
11. Be able to understand the need for the teacher to create a learning environment that fosters the development of each student’s mathematical power.
12. Recognize the need to be a part of his/her own evaluation.
13. Interact with a classroom teacher through observation and clinical experiences.
14. Present a research project.

**National, State, and PEU Standards Addressed in the Course**

**Interstate New Teacher Assessment and Support Consortium (INTASC) Standards**

**Standard 1: Subject Matter**
The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.

**Standard 2: Student Learning**
The teacher understands how children and youth learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.

**Standard 4: Instructional Strategies**
The teacher understands and uses a variety of instructional strategies to encourage students’ development of critical thinking, problem solving, and performance skills.

**Standard 5: Learning Environment**
The teacher uses an understanding of individual and group motivation and behavior to create a learning environment that encourages positive social interaction, active engagement in learning, and self-motivation.

**Standard 7: Planning Instruction**
The teacher plans and manages instruction based upon knowledge of subject matter, students, the community, and curriculum goals.

**Standard 8: Assessment**
The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social and physical development of the learner.

**Standard 9: Reflection and Professional Development**
The teacher is a reflective practitioner who continually evaluates the effects of her/his choices and actions on others (students, parents, and other professionals in the learning community) and who actively seeks out opportunities to grow professionally.

**Professional Organization/Learned Society Standards**

**Eight National Standards for the Evaluation of the Teaching of Mathematics:**
1. The Evaluation Cycle

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NCATE/NCTM Program Standards for Secondary Mathematics:

**Standard 8: Knowledge of Mathematics Pedagogy**  
Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning.

**Standard 16: Field-Based Experiences**  
Candidates complete field-based experiences in mathematics classrooms.

**Florida Educator Accomplished Practices (FEAPs)**

**ASSESSMENT**  
The preprofessional teacher collects and uses data gathered from a variety of sources. These sources include both traditional and alternate assessment strategies. Furthermore, the teacher can identify and match the students’ instructional plans with their cognitive, social, linguistic, cultural, emotional, and physical needs.

**COMMUNICATION**  
The preprofessional teacher recognizes the need for effective communication in the classroom and is in the process of acquiring techniques which she/he will use in the classroom.

**CONTINUOUS IMPROVEMENT**  
The preprofessional teacher realizes that she/he is in the initial stages of a lifelong learning process and that self-reflection is one of the key components of that process. While her/his concentration is, of necessity, inward and personal, the role of colleagues and school-based improvement activities increases as time passes. The teacher’s continued professional improvement is characterized by self-reflection, working with immediate colleagues and teammates, and meeting the goals of a personal professional development plan.

**CRITICAL THINKING**  
The preprofessional teacher is acquiring performance assessment techniques and strategies that measure higher order thinking skills in students and is building a repertoire of realistic projects and problem-solving activities designed to assist all students in demonstrating their ability to think creatively.

**HUMAN DEVELOPMENT AND LEARNING**  
Drawing upon well established human development/learning theories and concepts and a variety of information about students, the preprofessional teacher plans instructional activities.

**KNOWLEDGE OF SUBJECT MATTER**  
The preprofessional teacher has a basic understanding of the subject field and is beginning to understand that the subject is linked to other disciplines and can be applied to real-world integrated settings. The teacher’s repertoire of teaching skills includes a variety of means to assist student acquisition of new knowledge and skills using that knowledge.

**Florida Teacher Certification Examination (FTCE) Subject Area Examination (SAE) Competencies and Skills**

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14 Knowledge of instruction
1. Select appropriate resources for a classroom activity (e.g., manipulatives, mathematics models, technology, other teaching tools).
2. Identify methods and strategies for teaching problem-solving skills and applications (e.g., constructing tables from given data, guess-and-check, working backwards, reasonableness, estimation).

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Behavioral objectives</th>
<th>INTASC Standards</th>
<th>Professional Organization</th>
<th>FEAPs</th>
<th>FTCE SAE</th>
<th>PEU Conceptual Framework</th>
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<tbody>
<tr>
<td>Lesson Plan</td>
<td>Develop a daily lesson that includes methods and strategies for teaching mathematical problem-solving skills and applications</td>
<td>INTASC: 1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0</td>
<td>FEAPs: 1.1, 2.1, 4.1, 7.1, 8.1, 8.1a</td>
<td>CF 3.4, CF 4.1, CF 4.3, CF 5.1</td>
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<tr>
<td>Field Experience / Observation 1 (Activity)</td>
<td>Observe a teacher for the guiding concepts of teaching. Note the ones observed and comment on those not observed.</td>
<td>INTASC: 1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0</td>
<td>NCTM: 16.1</td>
<td>FEAPs: 1.1, 2.1, 4.1, 7.1, 8.1, 8.1a</td>
<td>CF 3.4, CF 4.1, CF 4.3, CF 4.5, CF 5.1</td>
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<tr>
<td>Research Project</td>
<td>Write a paper that examines how self-assessment can be an effective evaluation tool for teachers</td>
<td>INTASC: 1.0, 2.0, 4.0, 5.0, 7.0, 8.0, 9.0</td>
<td>FEAPs: 1.1, 2.1, 4.1, 7.1, 8.1, 8.1a</td>
<td>CF 3.4, CF 4.1, CF 4.3, CF 5.1</td>
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**Teaching Methods**
Teaching methods will be lecture, group discussion, student presentation, and direct observation in the classroom. The student will be required to spend at least 4 hours observing classroom teachers.

**Course Evaluation**
- Research project 20%
- Observations 40%
- Activity Evaluations 30%
- Class participation 10%

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Grading

The following scale shall be used as evaluation for final grades.

100 – 90 – A
89 – 80 – B
79 – 70 – C
69 – 60 – D
Below 60 – F

Course Policies

ATTENDANCE: This is a one (1) hour course and you are allowed one (1) unexcused absence. Please take that into consideration at all times. Excused absences that are signed by the dean’s office will not excuse assignments that are due or any assigned presentations. Those who exceed the allowed unexcused absences will receive an “F” as a final grade.

All students are expected to attend class each time a meeting is scheduled. You do not have to attend class on days on which you are assigned a clinical or an activity. All evaluations and critiques will be submitted via portfolio. No assignments will be accepted late. Be sure your course number and the assignment name is on the paper.

Tentative Course Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1/6/10</td>
<td>Syllabus, Portfolio, Ten guiding concepts for good teaching</td>
</tr>
<tr>
<td>1/13/10</td>
<td>Discussion – Ten guiding concepts (continued)</td>
</tr>
<tr>
<td>1/20/10</td>
<td>The Cyclic Process</td>
</tr>
<tr>
<td>1/27/10</td>
<td>Formative and summative evaluations</td>
</tr>
<tr>
<td>2/3/10</td>
<td>Sources of information, writing objectives, and lesson plans</td>
</tr>
<tr>
<td>2/10/10</td>
<td>Writing lesson plans (continued)</td>
</tr>
<tr>
<td>2/17/10</td>
<td>Assessment and Learning environment</td>
</tr>
<tr>
<td>2/24/10</td>
<td>Discourse, mathematical dispositions, and assessment</td>
</tr>
<tr>
<td>3/3/10</td>
<td>Problem solving, reasoning, and communication</td>
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<tr>
<td>3/10/10</td>
<td>Spring Break</td>
</tr>
<tr>
<td>3/17/10</td>
<td>Observation (activity)</td>
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<tr>
<td>3/24/10</td>
<td>Observation (activity)</td>
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<tr>
<td>3/31/10</td>
<td>Observation (activity)</td>
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<tr>
<td>4/7/10</td>
<td>Observation (activity)</td>
</tr>
<tr>
<td>4/14/10</td>
<td>Submission of the Portfolio</td>
</tr>
<tr>
<td>4/21/10</td>
<td>Evaluation of portfolio, presentation of research project</td>
</tr>
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</table>

References


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