

COURSE SYLLABUS – Spring, 2019
MAE 540/312
Microteaching (2 Credits)

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Course Description: This class will meet once weekly, complementing the semester of student observations. It is an important feature of the student math micro teaching experience and will serve as an introduction to actual teaching - a forum for sharing ideas, discussing current issues in math education, and a means to prepare for future effective teaching.

Required Resources:

- Articles to be distributed in class.

Learning Outcomes:

- Candidates demonstrate a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning.
- Students plan and present lessons that demonstrate understanding of the New York State Common Core Standards for Mathematics, including the Standards for Mathematical Practice.
- Candidate makes explicit connections to research or theory in justifying instructional plans.
- Students recognize the INTASC critical dispositions and New York State Code of Ethics, they demonstrate critical dispositions and ethics in their interactions with students and colleagues.
- Teacher candidates will research and describe in class how a student's social economic status impacts students achievement as well as their own student achievement. Students will explore and discuss the achievement gap in mathematics as pertaining to home/school resources, class, and race.
- Candidates will record one of their lessons and reflect on their own teaching. They will reflect on instruction, classroom management, and their relationship with their students.
- Teacher candidates work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

- Teacher candidates engage in ongoing professional learning and use evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (learners, families, and other professionals in the learning community), and adapt practice to meet the needs of each learner.
- Teacher candidates seek appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school.
- Teacher candidates understand how children learn and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.
- Teacher candidates use understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.
- Teacher candidates work with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.
- Teacher candidates understand the central concepts, tools of inquiry, and structures of the discipline and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
- The teacher candidate understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues.
- The teacher candidate understands and uses multiple methods of assessment to engage learners in their own growth, to monitor learner progress, and to guide the teacher's and learner's decision making.
- The teacher candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills and pedagogy as well as knowledge of learners and the community context.
- The teacher candidate understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections and to build skills to apply knowledge in meaningful ways.
- The teacher candidate engages in ongoing professional learning and uses evidence to continually evaluate his or her practice, particularly the effects of his or her

choices and actions on others, (learners, families, and other professionals in the learning community), and adapt practice to meet the needs of each learner.

- The teacher candidate seeks appropriate leadership roles and opportunities to take responsibility for student learning, to collaborate with learners, families, colleagues, other school professionals, and community members to ensure learner growth and to advance the profession.

Useful Websites:

- Mathematics Education Program: www.math.sunysb.edu
- Professional Education Program: www.stonybrook.edu/pep/
- NCTM: www.nctm.org
- NY State Common Core: www.engageny.org
- New York State Education Department: www.nysed.gov
- AMTNYS: www.amtnys.com
- Stony Brook’s SPD Seminars: www.sunysb.edu/spd/career/tworkshops.html
- Fingerprinting: www.sunysb.edu/spd/career/fingerprinting.html
- To access on-line evaluations: <https://pepprod.cc.stonybrook.edu:8443/pep4/PEP-1.jsp>
- For edTPA help: www.passededtpa.com
- edTPA support: <http://edtpa.aacte.org/>
- For math lessons: <https://immuminations.nctm.org/>

Requirements, Assessment, and Grading:

The grade you will receive for Seminar will be based as follows:

- Clinical Experience40%
- Lesson Plan and Presentation.....10%
- Design and Unit Presentation.....20%
- Evaluations from CTs.20%
- Class Participation and In-Class Assignments10%

No late assignments will be accepted for grading and all must be typed.

Clinical Experiences: Students will spend a total of 88 classroom periods divided between a Middle/Junior High School and High School placement. Of these, 22 periods need to be in a special education setting. Students will be required to submit the PEP time sheet at the end of the semester and will keep a journal summarizing and reflecting on each class period they observe.

Lesson Plan and Presentation: Students will be required to write a full period lesson plan picking a topic from their observation experiences. This lesson will then be taught to peers and critiqued for feedback, focusing on good public speaking, mathematical accuracy, and classroom management.

Design and Unit Presentation: Students will be required to design a unit plan with daily lesson plans and assessments. Common Core Learning Standards and/or New York State Standards must be included with each learning objective. After approval of this plan (by both the secondary teacher), it will be presented over a 1-2 week period to a class that is being observed. It is expected that students in this class will be formally and informally assessed. At the conclusion of this teaching assignment, there will be a 4 page written analysis of the project, citing all 4 of Danielson's domains. You must have at least one lesson videoed. All lesson plans, materials, and assessments from the unit are to be handed in.

Evaluation from CTs: An evaluation form regarding your field work will be completed by a cooperating teacher in both the high school and junior high school setting

Class Participation: All students are expected to participate and contribute to classroom discussions. Coming to class late or leaving class early will negatively impact your grade.

Americans with Disabilities Act:

If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students requiring emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information, go to the following website: <http://www.ehs.sunysb.edu/fire/disabilities/asp>

Critical Incident Management Policy:

Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, and/or inhibits students' ability to learn.

Academic Integrity:

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instance of academic dishonesty to the Academic Judiciary. For dishonesty, please refer to the academic judiciary website at <http://stonybrook.edu/uaa/academicjudiciary>.

