

SYLABUS

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COURSE DESCRIPTION

This course provides the fundamental methodology for teaching middle school mathematics. Candidates study the underlying principles of mathematics instruction for grades 5-9. Candidates use Principles and Standards for School Mathematics from the National Council of Teachers of Mathematics (NCTM) and the Common Core Standards.

COURSE RATIONALE and RELATIONSHIP to the TEACHER EDUCATION PROGRAM

To prepare teachers who can deliver high-quality mathematics education, the Loyola University Chicago teacher preparation program provides a strong knowledge base, positive attitude, and a wide range of instructional strategies. This course introduces the inservice and preservice teachers to the content and the methodology for grades 5-9 mathematics.

CONCEPTUAL FRAMEWORK STANDARDS

CF1: Candidates demonstrate an understanding of a current body of literature and are able to critically evaluate new practices and research in their field.

CF2: Candidates demonstrate knowledge and skills in a variety of school and professional settings.

CF3: Candidates demonstrate an understanding of issues of social justice and inequity.

CF4: Candidates demonstrate skills that will enable them to work effectively with diverse clients.

CF5: Candidates demonstrate technological knowledge and skills which enhance education.

CF6: Candidates demonstrate professional decision-making skills and behaviors in advancing social justice and service.

CF7: Candidates demonstrate how moral and ethical decisions shape actions directed toward service to others.

CF8: Candidates apply ethical principles in professional decision-making.

IDEA Objectives

1. Learning fundamental principles, generalizations, or theories
2. Learning to apply course material (to improve thinking, problem solving, and decisions)
3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course
4. Developing creative capacities (writing, inventing, designing, performing in art, music, drama, etc.)
5. Gaining a broader understanding and appreciation of intellectual/cultural activity (math.)

➤ **Syllabus Addendum Link:** <http://luc.edu/education/syllabus-addendum/>
This link directs students to the following required statements and can be used in place of adding each individual statement to your syllabus. Feel free to insert this link where you would normally reference this content in your syllabus.

- **Academic Honesty**
- **Accessibility**
- **Conceptual Framework**
- **EthicsLine Reporting Hotline**
- **Electronic Communication Policies and Guidelines**

DIVERSITY

Issues of diversity (socio-economic, ethnic, exceptionalities, and gender) are addressed through instructional methodology, assessment and technology. Teacher candidates study mathematics contributions made by a wide array of mathematicians.

METHOD OF ASSESSMENT

Assignments and Participation 30% No late assignments will be accepted.

Clinical Activities 20%

Midterm 20%

Final 30%

Livertext Dispostions

Professionalism

- Participates in all classes
- Prepares high quality instructional materials
- Arrives at clinical site ready to teach

All students can learn

- Identifies adaptations for students by name in lesson plan

Fairness

- Gives all students an equal chance to participate in lesson

GRADE ASSIGNMENTS

A 95-100%

A- 93-94%

B+ 91-92%

B 87-90%

B- 85-86%

C+ 83-84%

C 80-82%

C- 78-79%

D 77-70%

F 0-69%

TEXTBOOKS

Instead of a textbook, you will enroll as a student member of NCTM

NCTM Student Membership "Mathematicians Are People, Too: Volume II Stories from the Lives of Great Mathematicians ", Luetta Reimer, Wilbert Reimer

"It's in the Cards! Math Card Games", Diane Schiller

"The Man Who Counted"

"Get It Together: Math Problems for Groups Grades 4-12", Tim Erikson

"The Power of Tu" from The Power of 2: Integrating Math and Theater Experiences <http://thepoweroftwo.org/> (This is a math comic book and will be available in class. Checks for \$2.00 should be made out to "The Power of Two".)

Academic Honesty

Academic honesty is an expression of interpersonal justice, responsibility and care, applicable to Loyola University faculty, students, and staff, which demands that the pursuit of knowledge in the university community be carried out with sincerity and integrity. Academic dishonesty is one of several possible reasons why a student may be dismissed from the Graduate School of Education. For specific policies and procedures see: http://www.luc.edu/education/academics_policies.shtml#honesty

Accessibility

Students who have disabilities which they believe entitle them to accommodations under the Americans with Disabilities Act should register with the Services for Students with Disabilities (SSWD) office. To request accommodations, students must schedule an appointment with an SSWD coordinator. Students should contact SSWD at least four weeks before their first semester or term at Loyola. Returning students should schedule an appointment within the first two weeks of the semester or term. The University policy on accommodations and participation in courses is available at: <http://www.luc.edu/sswd>

Harassment

It is unacceptable and a violation of university policy to harass, discriminate against or abuse any person because of his or her race, color, national origin, gender, sexual orientation, disability, religion, age or any other characteristic protected by applicable

law. Such behavior threatens to destroy the environment of tolerance and mutual respect that must prevail for this university to fulfill its educational and health care mission. For this reason, every incident of harassment, discrimination or abuse undermines the aspirations and attacks the ideals of our community. For specific definitions of discrimination, abuse, and harassment refer p. 25-26 in the Loyola University Chicago Student Handbook, located at:

<http://www.luc.edu/studentaffairs/pdfs/LoyolaStudentHandbook2006.pdf>

If you believe you are subject to such harassment, you should notify your instructor. If you believe you are subject to harassment by your instructor, contact the Associate Dean of Academic Affairs at 312-915-6464.