



### Course Syllabus

<b>COURSE NUMBER:</b> SPED 5010 and MTH 4320	<b>COURSE TITLE</b> Teaching Mathematics for Disabled Learners	<b>TERM:</b> Fall 2008 term 2
<b>SITE:</b> Webster Groves	<b>INSTRUCTOR CONTACT INFORMATION:</b> Samantha Muehlenbeck 636 931-5270 H/ 314 954-4835 C	<b>CREDIT HOURS:</b> 3

**1. COURSE DESCRIPTION:** This course is designed to assist the classroom teacher in teaching the problem learner mathematics. As a component of special education certification, it will concentrate on the structure and accommodations necessary for diverse learners with an emphasis on understanding and retention of concepts and application of concepts to solve problems. The course will provide tools to individualize instruction in a variety of school environments based on assessment and effective planning.

**2. LEARNING OUTCOMES:**

Course Outcomes Learner outcomes	Special Education Program outcomes	SoE Goals, SoE Dispositions, and MoSTEP/Prof Standards Addressed
Will describe methods for increasing accuracy and proficiency in math calculations	Pre-service education candidates assess, diagnose, and develop individualized instructional programs for students with special needs	GC4 K6 SOE 1.4 MO-STEP 5.1
Will task analyze math skills and prerequisites based on the scope and sequence of math skills outlined in the general education curricula	Pre-service special education candidates develop long-ranged individualized instructional plans anchored in both general and special curricula. Special educators also develop a variety of individualized transition plans. Special educators are comfortable using appropriate technologies to support instructional plan	GC4 S13 SOE 1.1, 1.3 MO-STEP 1.1, 2.1
Will describe remediation strategies for error patterns in mathematics	Pre-service education candidates assess, diagnose, and develop individualized instructional programs for students with special needs	GC4 S5 GC4 S12 SOE 2.1, 2.2 MO-STEP 5.1
Will describe appropriate individualized math programs for an	Pre-service education candidates assess, diagnose, and develop	GC4 S5, CC7 S6, CC4 S3 SOE 2.1, 2.2

individual as well as a class of students with special needs based on IEP goals	individualized instructional programs for students with special needs	MO-STEP 4.1, 5.1
Will select appropriate technology resources and websites based on student's math skills	Pre-service special education candidates develop long-ranged individualized instructional plans anchored in both general and special curricula. Special educators also develop a variety of individualized transition plans. Special educators are comfortable using appropriate technologies to support instructional plan	GC4 S7, CC7 S9 SOE 2.3 MO-STEP 11.1, 11.2
Will describe formal and informal assessment activities in mathematics	Pre-service education candidates assess, diagnose, and develop individualized instructional programs for students with special needs	CC8 S4 SOE 2.4 MO-STEP 8.1
Will identify motivational materials for math practice and fun	Pre-service special education candidates actively create learning environments for individuals with special learning needs that foster cultural understanding, safety, and emotional well-being, positive social interactions, and active engagement	CC5 S4 SOE 2.3 MO-STEP 5.1
Will describe the components of math curricular decision making as well as essential skills curriculum in math	Pre-service education candidates understand the effects that an exceptional condition can have on an individual's learning in school and throughout life	CC3 K2 SOE 1.1, 2.1, 4.3 MO-STEP 3.2, 3.4
Will critically review literature based on individualized strategies, individualized instruction, adaptations and modifications and learning theory in math	Pre-service special education graduates will be reflective practitioners, knowledgeable about professional resources and adhere to the ethical standards of the profession	SOE 3.1 SOE dispositions MO-STEP 9.2
The student is guided by the profession's ethical and professional practice standards	Pre-service special education graduates will be reflective practitioners, knowledgeable about the professional resources and adhere to the ethical standards of the profession	SOE 3.1 SOE dispositions 1.4, 2.3, 3.1, 3.2, 3.5 MO-STEP 9.3 CC9, K4, CC9 S1, CC9 S2, CC9 S3,

		CC9 S4, CC9 S7, CC9 S11
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**3. Schedule of required readings, class preparations and assignments, lectures, discussions, student presentations, out-of-class assignments and exams.**

The following information will be handed out in class. The class schedule and assignments will vary depending on individual needs in class. You can be guaranteed to complete a Unit plan with presentation, journal entries, chapter quizzes, and a final exam if your quiz scores do not average a 90% or better. Tons of take home manipulatives are created in each class so attendance is vital.

**4. RESOURCES:**

*Required Text(s):* (Insert text information below; box will expand as you type.)

Tucker, Benny F., Singleton, Ann H., Weaver, Terry L (2006). Teaching Math to all Children(2<sup>nd</sup> ed),Ohio: Pearson Merrill Prentice Hall.

**5. EVALUATION: (basis of evaluation with explanation regarding the nature of the assignment and the percentage of the grade assigned to each item below)**

(Insert evaluation Criteria below; the boxes will automatically expand as you type.)

Assessments	Links to Course Outcomes	Points possible
Literature reviews	Will critically review literature based on instructional strategies, individualized instruction, adaptations and modifications and learning theory in mathematics	15
Journals	Will use literature review strategies on target student to determine strategy's success	15
Case study assignment	Will describe remediation strategies for error patterns in mathematics	10
Math curricular decision making assignment	Will describe the components of math curricular decision making as well as essential skills curriculum in mathematics	10
Unit plan	Will describe appropriate math program for a class of students based on IEP goals. Will describe methods for increasing accuracy and proficiency in math calculations. Will describe formal and informal assessment activities. Will describe remediation strategies for error patterns. Will identify motivational materials for math practice and fun	100
Chapter quizzes		40
Final exam		40
attendance		10

**6. GRADING SCALE: (Insert grading scale criteria below; the box will automatically expand as you type.)**

A 92-100 A- 90-91 B+ 88-89 B 82-87 B- 80-81 C70-79 NC 69-below
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**Note: ALL PAPERS/PROJECTS MAY BE RETURNED VIA A SELF-ADDRESSED, STAMPED ENVELOPE. PAPERS ARE NOT AVAILABLE FOR PICK-UP IN THE SoE OFFICE.**

## ACADEMIC HONESTY POLICY

**Students at Webster University are expected to practice academic honesty.**

### **Avoiding Plagiarism**

Plagiarism is intentionally claiming that another person's work is his/her own or implying that another person's work is his/her own (through inadequate or inaccurate citations of reference material.)

#### **Students:**

- Should not copy whole portions of text from another source as a major component of papers or projects.
- Should identify the title, author, page number/webpage address, and publication date of works when directly quoting small portions of texts, articles, interviews, or websites.
- Should appropriately identify the source of information when paraphrasing (restating) ideas from texts, interviews, articles, or websites.
- Should follow the guidelines of the American Psychological Association Style Guide when referencing all research sources.

#### **Consequences of Academic Dishonesty:**

Students may receive a grade reduction, no credit for the class, or dismissal according to University policy.

For further information about the consequences of academic dishonesty please consult the Webster University Student Handbook.

## ACCESSIBILITY/ACCOMMODATIONS POLICY

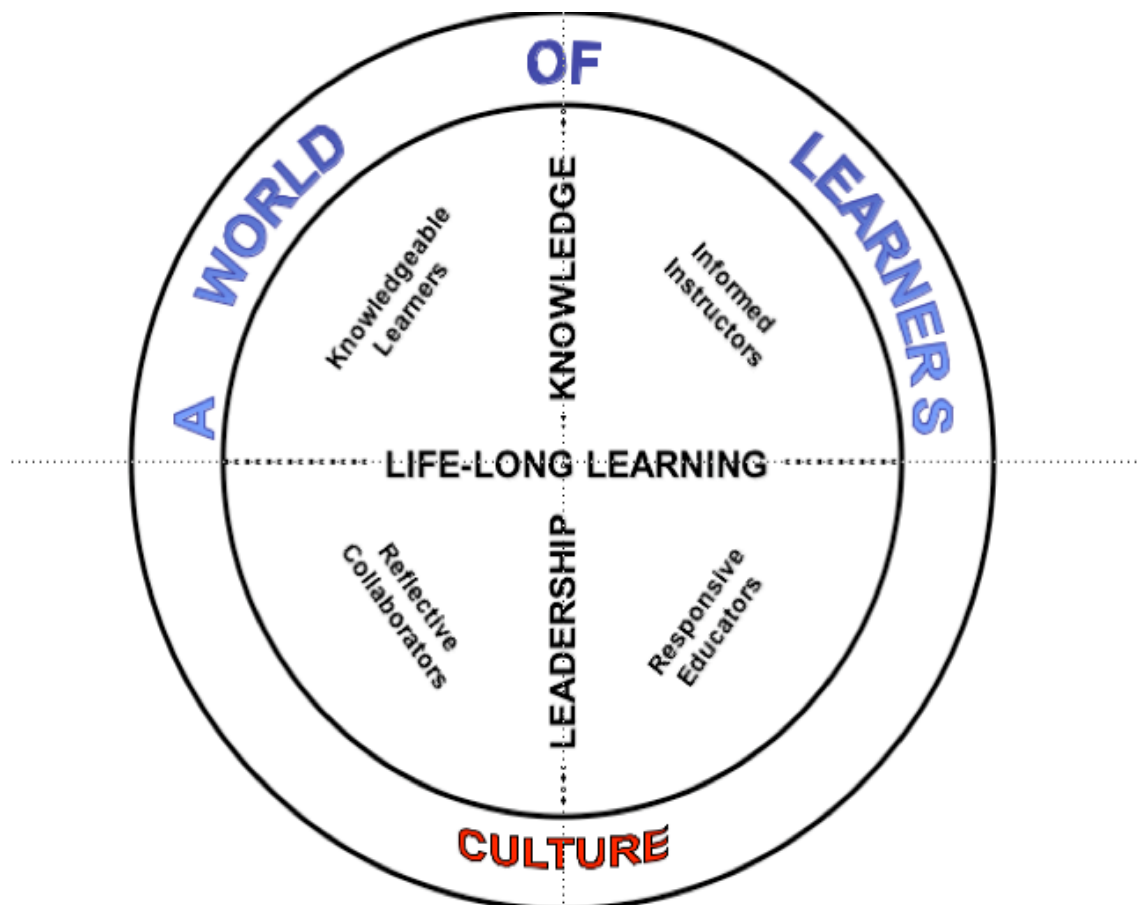
If you have a disability that may have some impact on your work in this class and for which you may require accommodations contact the Director of the Academic Resource Center, Dr. Pat McLeese, at (314) 968-7495.

**Webster University  
School of Education**

**Vision:** “. . . We all must work to make this world worthy of its children.” (Casals, 1970)

**Mission:** The School of Education at Webster University provides its students with the knowledge, experiences, and practical tools that help them guide both themselves and others toward lifelong learning. The School of Education is a community of educator-scholars who apply critical reflections and creative energies to enhance learning in schools and other educational settings. The faculty strives to support this community by modeling effective teaching practices based on sound theory and research. Personalized approaches create a challenging, yet supportive environment that permits the risk-taking necessary for learning and growth. The School of Education encourages its faculty and students to work actively toward this end, keeping in mind that action must be rooted in visionary, yet realistic, thinking. This thought and action process underscores the development of an inner-directed self-understanding, an outer-directed global perspective, and an appreciation of human diversity that arises from both.

**Theme:** Developing a world of learners through knowledge, leadership, and life-long learning.



The universal mandala (a circle with intersecting vertical and horizontal lines) graphically represents the conceptual framework of the School of Education. The outer circle provides the framework for a “world of learners” in cultural settings. The two axes represent the theme components of knowledge, leadership, and life-long learning. These lines are broken to emphasize the fluid relationship of the goals and integrated concepts. Each quadrant represents one of the school’s four goals for its candidates: to develop knowledgeable learners, informed instructors, reflective collaborators, and responsive educators.

## School of Education Goals

1. Education candidates will demonstrate knowledge of the subject matter, knowledge of the learner, and knowledge of pedagogy based on inquiry and scholarship.

### The knowledgeable learner:

- 1.1 knows content that supports conceptual understanding;
  - 1.2 applies tools of inquiry to construct meaningful learning experiences;
  - 1.3 identifies developmental factors in student learning; and
  - 1.4 understands theoretical principles of effective instruction to plan learning experiences.
2. Education candidates will incorporate multiple assessment and instructional strategies to support effective educational practices based on research and theory.

### The informed instructor:

- 2.1 designs curriculum based on students' prior knowledge, learning styles, strengths, and needs;
  - 2.2 understands and uses a range of instructional strategies;
  - 2.3 uses a variety of communication modes, media, and technology to support student learning; and
  - 2.4 employs a variety of formal and informal assessments to monitor learning and modify instruction.
3. Education candidates will reflect on the roles educators take as leaders of change through collaboration with colleagues, students, and families in schools and communities.

### The reflective collaborator:

- 3.1 values and integrates reflection to grow as a professional;
  - 3.2 promotes communication and collaboration with colleagues, families, and community leaders;
  - 3.3 seeks relationships with families and students to support student learning; and
  - 3.4 initiates change that benefits students and their families.
4. Education candidates will demonstrate respect for diversity through responsive teaching and learning that values individual differences.

### The responsive educator:

- 4.1 understands and responds appropriately to issues of diversity
- 4.2 acknowledges social and cultural contexts to create effective teaching and learning environments;
- 4.3 adapts instruction to the learner's knowledge, ability, and background experience; and
- 4.4 identifies resources for specialized services when needed.

## School of Education Dispositions

NCATE defines dispositions as “the values, commitments and professional ethics that influence behaviors toward students, families, colleagues, and communities and affect student learning, motivation, and development as well as the educator’s own professional growth. “ (Professional Standards, p. 53) There is significant value in focusing attention on qualities that make an effective teacher.

1. Understands and Respects Self
  - 1.1 Understands and respects that s (he) may be different from others
  - 1.2 Embraces an openness to change (adaptability, flexibility)
  - 1.3 Exhibits curiosity
  - 1.4 Engages in reflection
2. Understands and Respects Others
  - 2.1 Understands, respects, and responds appropriately to diversity in a variety of settings
  - 2.2 Exhibits empathy
  - 2.3 Commits to fairness and honesty
  - 2.4 Listens respectfully to other points of view

3. Understands and Respects Professional Communities
  - 3.1 Commits to professional behavior in university and school cultures
  - 3.2 Practices informed decision-making in university and school cultures
  - 3.3 Communicates and collaborates in university and school cultures
  - 3.4 Accepts academic rigor (willingness to work/ high expectations)
  - 3.5 Affects change with courage and confidence

**(Attach Specialty Program Area Professional Standards, MoSTEP General Standards, and MoSTEP Subject specific competencies if desired).**