ED631.01.3 Syllabus (Fall M 07)

by Mary Pat Sjostrom

Chaminade University of Honolulu

INSTRUCTOR

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OFFICE HOURS

Brogan Education Building Room 118
Tuesdays and Thursdays 4:30 - 5:30
Mondays 1 - 3 p.m.
other hours by appointment - please email

TIME and LOCATION

Mondays 5:30 - 9:30 p.m.
ED 101

TEXT

Required (Used also for ED 646):

Reys, R. E., Lindquist, M. M, Lambdin, D. V., & Smith, N. L. (2007). *Helping Children Learn Mathematics* (8th Edition). Hoboken, NJ: John Wiley & Sons, Inc. ISBN 978-0-471-71095-0

Smith, N. L., Lambdin, D. V., Lindquist, M. M, & Reys, R. E. (2007). *Teaching Elementary Mathematics: A Resource for Field Experiences* (3rd Edition). Hoboken, NJ: John Wiley & Sons, Inc. ISBN 978-0-470-04516-9

LIVETEXT

Submission of Signature Assignments and other assignments as identified by instructor require a *LiveText* account. You will be given a key code to register during the first week of the semester.

To register, login to *LiveText* at http://www.livetext.com

To submit an assignment for review and assessment, see instructions on the Education

Division LiveText help website at
http://acad.chaminade.edu/dept/education/LiveText/LiveText.html
"Completing and submitting work for review"

CATALOG DESCRIPTION

This course includes philosophy and rationale for the teaching of math to young children. General math theory and concepts are demonstrated through the use of math materials and other manipulatives. *Requires 10 hours of observation and participation (O&P).*

MAJOR COURSE TOPICS

1. Teaching Mathematics with Understanding
2. Standards, Lesson Planning
3. Problem Solving
4. Number Concepts
5. Meanings of Operations
6. Strategies for mastery of Basic Facts
7. Place Value Development
8. Whole Number Computation
9. Fraction Concepts
10. Algebraic Thinking
11. Measurement Concepts
12. Geometry Concepts

PROGRAM OUTCOMES

HI-CHAM-PB-EE-PO.1	PLAN: The successful candidate will design meaningful learning experiences that incorporate knowledge of content, students, learner outcomes, pedagogy, and assessment for grades K-6.
HI-CHAM-PB-EE-PO.2	TEACH: The successful candidate has a competent grasp of content knowledge, employs appropriate pedagogical practices, and utilizes resources to facilitate the learning process for students in grades K-6.

STUDENT LEARNING OUTCOMES (SLO)

Student Learning Outcomes (SLO)	How will each outcome be achieved? (e.g., Assignments, reading, lecture, fieldwork, etc.)
Utilize mathematical content knowledge and problem solving skills to investigate real life mathematical situations, to formulate valid questions from problem situations, and to represent situations verbally, numerically/symbolically, graphically, and/or geometrically.	Weekly assignments Problem solver write ups

Use the NCTM standards and HCPS benchmarks for grades K-3 to guide the planning of standardized, comprehensive, meaningful, and integrated math lessons that engage students in active, hands-on, problem-based learning experiences.	Signature assignment Class Presentation Lesson Plans O&P assignments
Identify and review mathematics resources, and effectively use various forms of technology to enhance student experiences in the K-3 classroom..	Journal article reviews Signature assignment Weekly assignments

ACADEMIC REQUIREMENTS

Assignments	Weight (% of grade)
Signature Assignment: Math mini-unit for Grades K-2	25
Weekly assignments (in and outside of class)	20
Class Presentation	7
Lesson Plans (2)	12
Problem Solver Write-ups (2)	8
Journal article reviews - summary and reflection (2)	8
O&P assignments and reflective journal	20

Grading Scale:

A 90 - 100
B 80 - 89
C 70-79 (Does not count for graduate credit; must retake course)
F Below 70

UNIVERSITY POLICIES

Attendance

Graduate programs are presented in 10-week accelerated semesters. Each class meets four hours once each week during the term. Where class schedules are interrupted for some reason, the instructor will arrange to make up the missing meeting. In general, University policy requires students to attend all class meetings of the course for which they are registered. If an emergency prevents the student from attending, the instructor should be informed immediately. Because graduate terms are accelerated, no more than one class absence can be allowed. Missing more than 1 hour of a class will be counted as an absence. More than one absence will result in a failing grade for the course.

The student is responsible for making up any work missed during an excused absence. It is the student's responsibility to contact the instructor prior to the next class meeting to determine make up work for the missed class. Points will be deducted from the overall class grade (up to 10 %) for an unexcused absence or for an excused absence for which work is not made up.

Writing Standards

All work submitted by Chaminade University students must meet the following writing standards. Written assignments should:

1. Use correctly the grammar, spelling, punctuation, and sentence structure of Standard Written English.
2. Develop ideas, themes, and main points coherently and concisely.
3. Adopt modes and styles appropriate to their purpose and audience.
4. Be clear, complete, and effective.
5. Carefully analyze and synthesize material and ideas borrowed from sources. In addition, the sources of the borrowed material should be correctly acknowledged to avoid plagiarism.

Plagiarism - "Plagiarism is the offering of work of another as one's own. Plagiarism is a serious offense and may include, but is not limited to, the following:

1. Complete or partial copying directly from a published or unpublished source without proper acknowledgment to the author. Minor changes in wording or syntax are not sufficient to avoid charges of plagiarism. Proper acknowledgment of the source of a text is always mandatory.
2. Paraphrasing the work of another without proper author acknowledgment.
3. Submitting as one's own original work (however freely given or purchased) the original exam, research paper, manuscript, report, computer file, or other assignment that has been prepared by another individual.

Incomplete

An incomplete (I) may be given to a student who did not complete a portion of the work or final examination due to circumstances beyond the student's control. The incomplete contract must be signed by the student and the instructor. The work must be completed in 90 days or the incomplete will revert to the grade that the student would have earned. This grade and the date the work is due will be specified on the incomplete contract.

Please refer to your **Student Handbook, General Catalog,** and the **Education Division Policy Manual** for other important institutional and academic policies including more detailed information regarding Plagiarism, Classroom department, Freedom of Expression, Add/Drop, Disabilities, and others.

WEEKLY SCHEDULE

Week	Date	Major Topic	Required Reading (after week 1, readings should be done before class)	Assignments Due on or before the following Monday
1	Oct. 1	A new vision for school mathematics	HCLM* Chapters 1-2	Problem Solver 1 Discussions (WebCT): Math Autobiography
2	Oct. 8	Doing Math Number Sense Place Value	HCLM Chapters 7-8	Journal Article 1 (LiveText) Discussions (WebCT): What does it mean to DO mathematics?

3	Oct. 15	Planning and Teaching Lessons	HCLM Chapters 3 and 9	Lesson Plan 1 Signature Assignment: Topic, Standards, Benchmarks Discussions (WebCT): Reflection on Annenberg video
4	Oct. 22	Whole Number Operations Basic Facts	HCLM Chapter 11	O&P Log 1 Signature Assignment: Big Ideas Discussion (WebCT): LiveText resources - Unitedstreaming videos
5	Oct. 29	Standard and Alternative Algorithms	*FEG: Games (p. 96-138) Come prepared to teach a game for grades K-2 to a small group.	Journal Article 2 (LiveText) Signature Assignment: Resources Discussion (WebCT): Describe how one game presented is aligned with the NCTM Principles and Standards.
6	Nov. 5	Unit Planning Assessment	HCLM Chapter 4	Problem Solver 2 Signature Assignment: Assessment Plan
7	Nov. 12	Fractions	HCLM Chapter 12, p. 286-299	O&P Log 2
	Nov. 19	No class	Thanksgiving Week	
8	Nov. 26	Measurement	Chapter 16, p. 386-401	Lesson Plan 2 Lesson Plan reflection Signature Assignment - Draft
9	Dec. 3	Implementing the vision	FEG: Technology (p. 139-174) Come prepared to lead the class in an activity using calculators or computers. The activity should be appropriate for grades K-2; C-TRAC has TI-15 and 73 calculators you may borrow.	O&P Log 3, reflective journal Discussion (WebCT): Appropriate uses of calculators (Reys p. 254 #2) Signature Assignment - Final
10	Dec. 10	Class Presentation		

*HCLM: *Helping children learn mathematics*
FEG: Field Experience Guide - *Teaching elementary mathematics: A resource for field experiences*
Weekly outline subject to change at the discretion of the instructor.

MISSION STATEMENT

Chaminade University offers its students an education in a collaborative learning environment that prepares them for life, work and service. Guided by its Catholic, Marianist and liberal arts educational traditions, Chaminade encourages the development of moral character, personal competencies, and a commitment to build a just and peaceful society. The University offers both the civic and church communities of the Pacific region its academic and intellectual resources in the pursuit of common aims.

Furthermore, the Marianist approach to education is characterized by the following:

- Educate for formation in faith
- Provide an integral, quality education
- Educate in the family spirit
- Educate for service, justice and peace
- Educate for adaptation and change

O&P ASSIGNMENT

Paperwork

All paperwork associated with the O&P experience must be turned in on time and to the appropriate person, as directed by the Field Advisor.

Reflective journal

Keep a reflective journal of your O&P experiences. Turn this journal in to the instructor at the end of the O&P experience. (It will be returned to you.)

The journal should not be simply descriptive; make connections to what you are learning in your education courses. Remember to honor confidentiality in this journal – no names should be used. Also remember to reflect in a professional manner on what you can learn; it is not professional to be critical of school personnel.

O & P Logs (Choose at least 1 from each category).

In the School: Learning about the School and its Resources

1. Classroom Sketch with reflection (p. 7)
2. Mathematics Textbook Unit with reflection (p. 10)
3. Counting in the Textbook and Classroom with reflection (p.13)
4. Place Value in the Textbook and Classroom with reflection (p.14)
5. Basic Facts in the Textbook and Classroom with reflection (p.16)

In the School: Observing the Teacher and Students

1. Children's Development with reflection (p.23)
2. The Learning Environment with reflection (p.29-30)
3. Analyzing Classroom Discourse with reflection (p.33-34)
4. Focusing on Individuals with reflection (p.35-36)
5. Performance Task with reflection (p.43-44)
6. Mathematical Processes with reflection (p.45-46)

In the School: Interviewing the Teacher and Students

Choose 1 Teacher Interview
or
Choose 1 Student Interview from pages 54-95.