

MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Semester/Year: Spring/2011

COURSE NUMBER: EDU 257 (5H1)

INSTRUCTOR: Lori Brucken

COURSE TITLE: Math Methods and Materials

OFFICE NO: Building 3, Room 4

CREDIT HOURS: 3

OFFICE/VIRTUAL HOURS: Office hours are Tuesdays from 1-2 pm. and 3-4 pm. Special appointments can be scheduled if necessary.

CONTACT HRS/WK: 4 (2 class, 2 lab)

This course meets on Tuesdays and Thursdays from 11-12:25 p.m. The remainder of the course is to be completed online through Blackboard.

PHONE NO: I can be reached directly at 252-789-0206

PREREQUISITES: Take one set. Set 1: ENG 090, RED 090 and MAT 060 – Set 2: ENG 095 and MAT 060.

FAX: (252)792-0826

E-MAIL: lbrucken@martincc.edu

COREQUISITES: None

COURSE DESCRIPTION:

This course covers concepts, activities, methods, and materials for teaching mathematics in elementary through middle school grades. Topics include individual instruction, developmental skill building, manipulatives, problem solving, critical thinking, and numerical concepts. Upon completion, students should be able to assess, plan, implement, and evaluate developmentally appropriate math experiences relating to the NC Standard Course of Study.

PROGRAM LEARNING COMPETENCIES:

1. Create environments that are healthy, respectful, supportive and challenging for all children.
2. Design and implement developmentally effective curriculum that addresses all domains of learning.
3. Support and empower all children, families, and communities through trusting and respectful reciprocal relationships.
4. Use authentic assessment responsibly to make informed decisions to guide all children's learning.
5. Communicate effectively using standard written and verbal skills.
6. Utilize technology to enhance learning for all children.
7. Serve as a leader, advocate, and professional in the field of early education.

PROGRAM LEARNING OUTCOMES:

1. Demonstrate professional traits expected in school-age education.
2. Plan, develop, and implement a developmentally/culturally appropriate (DCAP) lesson plan and activity for school-age children.
3. Develop a rubric, checklist, and/or rating scale for use with school-age children.

COURSE LEARNING OUTCOMES:

1. Assess developmentally and culturally appropriate (DCAP) mathematical experiences.
2. Plan DCAP mathematical experiences.
3. Implement and evaluate DCAP mathematical experiences.

REQUIRED TEXTBOOKS:

Charlesworth, R., & Lind, K. (2010). Math and science for young children (6th ed.). Clifton Park, NY: Cengage Learning. ISBN: 9781435400948

SUPPLEMENTAL RESOURCES: None

LEARNING/TEACHING METHODS: There will be a combination of lecture, reading, writing, and discussion; individual and cooperative hands-on projects/assignments; quizzes and tests; as well as computer and other types of research throughout the semester.

The course will be structured by the following learning principles:

1. Learning is individual and social. The learning environment should support the student’s individual development in the context of the group.
2. Learning must be student–centered and authentic (real-life). Students are less likely to not retain information that is not interesting and meaningful.
3. Knowledge is constructed, not transmitted. While learners receive content, they must make it their own through higher-order thinking and inquiry.
4. Learning is experiential. Students learn better when they are actively engaged with the content they are studying.
5. Lessons should be challenging. Students learn best when they are given challenges, choices and responsibility in their own learning.
6. A learning environment must provide time for reflection. Teachers should balance the immersion in experience and expression between opportunities for the student to self-monitor and assess their progress, thus setting direction for further learning.

ASSESSMENTS/METHODS OF EVALUATION:

1. Tests = 30% of grade
2. Assignments = 45% of grade
3. Professionalism = 10% of grade
4. Final Exam = 15% of grade

(Outside reading assignments will be calculated as a portion of the Assignments score.)

GRADING POLICY:	93 – 100%	A
	85 – 92%	B
	77 – 84%	C
	70 – 76%	D
	69% and below	F

COURSE OUTLINE:

- Week 1: Section 1 Concept Development in Mathematics and Science: Units 1 - 3
- Week 2: Section 1 Concept Development in Mathematics and Science: Units 4 - 7
- Week 3: Section 2 Fundamental Concepts and Skills: Units 8 - 10
- Week 4: Section 2 Fundamental Concepts and Skills: Units 11 - 13
- Week 5: Section 2 Fundamental Concepts and Skills: Units 14 - 16
- Week 6: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 17
- Week 7: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 18
- Week 8: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 19
- Week 9: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 20
- Week 10: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 21
- Week 11: Section 3 Applying Fundamental Concepts, Attitudes, and Skills: Unit 22

Week 12: Section 4 Symbols and Higher-Level Activities: Units 23 - 26

Week 13: Section 5 Mathematics Concepts and Operations for the Primary Grades:
Units 27-29

Week 14: Section 5 Mathematics Concepts and Operations for the Primary Grades:
Units 30-32

Week 15: Lesson Planning

Week 16: Review/Final Exam

This outline is tentative and may be subject to change. As teachers and students, we must be flexible.

STUDENT ATTENDANCE POLICY:

Martin Community College recognizes that academic success is tied to regular attendance and completion of assigned work and tasks in a timely manner. Students are expected to attend a minimum of 80 percent of the total hours for a course, which includes classes, labs, and shops.

Some courses and programs have stricter attendance requirements of 85, 90, or 95 percent based upon the difficulty and complexity of the subject matter. General Education and Developmental courses require 85 percent attendance. The attendance requirement for Early Childhood Education and School-Age Education students is ninety percent (90%). This means a student is allowed to miss only five hours of class time. Attendance will be taken at seated class sessions.

The census date is the date on which ten percent (10%) of the total course hours have met. Students must be present in at least one class during the first ten percent (10%) of a course in order to be considered enrolled in the class. If a student has not attended at least one class by the ten percent census date, the instructor will administratively withdraw the student.

Students who miss more than six contiguous contact hours or fail to attend the required percentage of total hours without a justifiable absence and verifiable contact with the instructor may be administratively withdrawn from the class by the instructor and given a grade of “WF.” The “WF” will be equivalent to an “F” when calculated into the student’s GPA. The course syllabus will indicate what the instructor considers a justifiable absence and will define “verifiable contact.” Students may remove a “WF” by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw without receiving an “F.” The last day to officially withdraw without receiving an “F” is published in the academic calendar for each academic year. The official withdrawal date for mini sessions, block courses, or other non-traditional schedules are available from the registrar and will be included on the course syllabus.

Make-up work may be allowed at the discretion of the instructor. Late work or make-up work receives an automatic deduction of ten percent (10%) from the earned grade for each day it's late. Students in clinical and cooperative educational work experiences must complete 100 percent (100%) of the required hours to receive a passing grade. Clinical or cooperative work experience make-up hours require clinical or cooperative educational work site approval and approval of the instructor.

Habitual tardiness and/or early departure in this course will be considered in computing class attendance as well as your professionalism grade.

Students will be counted absent from the date they register for each course.

Note: Under DVA regulations, the enrollment of veterans or dependents will be terminated or adjusted if they are administratively withdrawn or if they officially withdraw.

If an instructor fails to report for a class within 15 minutes of the scheduled beginning time and has not left instructions, those students present should sign a sheet before leaving and designate a student to submit it to the Dean of Academic Affairs and Student Services.

Missed Tests: Any missed test will result in a “0” for the grade without proper documentation.

REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES:

***In compliance with G. S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student’s faith. The policy limits the excused absences to a maximum of two days per academic year.**

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a form to the instructor(s) prior to the census date of each class. The **Request for Excused Absences for Religious Observances** form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

Attendance will be taken at seated class sessions.

COURSE POLICIES:

Professional Behavior Policy:

This course will rely heavily on in-depth discussions of course readings, homework assignments, in-class activities, and projects. Your attendance, being on time and participation are required. Attendance will be taken each class session. All readings which are assigned must be completed prior to class sessions where they will be discussed. Students are expected to contribute to the class by engaging in discussion with fellow students and the instructor. You will also be expected to actively participate during in-class activities.

I believe that each student has important perspectives to contribute, and your input will be valued. During this semester, I am not only interested in teaching content but also in developing your professional knowledge, dispositions, attitudes and behavior. These traits include but are not limited to: being organized and prepared; effectively communicating; showing initiative; demonstrating commitment, honesty and reliability; utilizing problem-solving skills; being flexible and having a sense of humor; demonstrating a TEAM concept; accepting ownership/responsibility; etc. All of these attributes will be assessed with a professionalism score, which will be an important part of your overall grade.

Academic Integrity Policy:

Students in the Early Childhood or Teacher Associate Programs at Martin Community College are expected to exhibit the highest personal integrity in all academic work and behavior. Lying, cheating, and plagiarism are forms of academic dishonesty that violate the integrity of any academic process and WILL NOT be tolerated.

For purposes of this class:

Lying includes but is not limited to falsifying information provided as verification for the reason you were not able to complete work on time.

Cheating is receiving, giving, or helping another student receive or give any information during a quiz, test, examination, or individual assignment without the express permission of the instructor; copying work from another student, or submitting work done by another student as your own; using unauthorized materials or equipment during a quiz, test, or examination, e.g. notes or books or electronic devices; communicating the subject matter, or contents of a quiz, test, or examination to another student unless specifically authorized by the instructor to share it; taking a quiz, test, or examination for another student; obtaining quiz, test, or examination

questions beforehand, including viewing any quiz, test, or examination presented on the internet before answering for submission; tampering with the grading of a quiz, test, or examination; working with others in completing take-home quizzes, tests, or examinations, or individual assignments unless the instructor specifically authorizes collaborative work.

Plagiarism is to take ideas, writing, etc. from another and pass them off as one's own. Plagiarism is fraud, and under U.S. law it is theft. Almost all forms of expression are covered by some form of legal protection, as intellectual property of the originator. Using another's words or thoughts and not giving them credit appropriately is plagiarism.

Any violation of academic integrity will result in disciplinary actions for a violation of academic integrity. An instructor may give a zero for the assignment, quiz, test, or examination. The student will receive an "F" for the course and will be dropped from the current semester roll. For more information concerning the behavior expected of a student at Martin Community College, please see the Student Governance and Conduct Code of the Martin Community College Career Catalog.

Keep in mind that as your instructor, I am often asked to be a reference on your behalf. Academic integrity violations and/or violations of the Student Governance and Conduct Code, as well as a lack of professionalism may affect your ability to get a job in the future. You are studying to obtain work in a field that requires high standards. You should be developing your professional communication skills, attitudes, actions, and behaviors starting now.

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at (252) 789-0246 or (252) 789-0247 by phone, pbroughton@martincc.edu by email, or in person at her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.