Fundamentals of Mathematics I, SMTE1350.001
Department of Mathematics and Statistics
Summer 1 2015

A. COURSE INFORMATION

   Course number/section: SMTE 1350.001
   Class meeting time: MTWF 2-3:53
   Class location: CS 107
   Course Website:

B. INSTRUCTOR INFORMATION

   Instructor: Marcia Venzon
   Office location: CI 367
   Office hours: MTWF 1:00
   Telephone: 361 825-2844
   e-mail: Marcia.venzon@tamucc.edu
   Appointments:

C. COURSE DESCRIPTION

   This course provides the conceptual framework for understanding and applying properties, models and operations of number systems. Related topics are studied in problem solving settings. Most students in this course have learned mathematics through a rule-based, abstract instructional program. This course is designed to emphasize in-depth basic understandings of number systems and arithmetic patterns, which are core ideas in the elementary mathematics curriculum. Communicating concepts, processes or solutions effectively, in oral and written forms, will be emphasized.

D. PREREQUISITES AND COREQUISITES

   MATH 1314: College Algebra or equivalent, or placement beyond College Algebra on the departmental placement test.

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

   • Mathematical Reasoning for Elementary Teachers, Long, Temple, Millman, 6th Edition. Students will need to purchase registration for MyLabsPlus (comes packaged with the textbook at the campus Barnes and Noble bookstore and the Islander Book Store). Any scientific calculator, TI-83, or elementary calculators TI –10 or TI-15 Explorer, or TI-35 ($10 at Walmart)
   • The course will cover Chapters 1-6 of the textbook. Homework will mostly be online in MyLabsPlus.
• Website for MyLabs Plus is www.tamucc.mylabsplus.com. Technical number to call for problems is 1-888-883-1299. Sign in with your A# and ask for them to send you a password.

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

SMTE 1350 – Fundamentals of Mathematics I

Student Learning Objectives.

If the student meets the expectation of the instructor for completing assigned tasks, reflecting on the daily activities, studying the key concepts discussed during class, and getting additional help when needed, then the student will be able to:

1) Use, model, justify and explain characteristics and patterns in numeration systems, and compare and contrast different numeration systems (e.g. base ten, other place-value-based systems, Babylonian, Roman Numerals).

2) Use, model, justify and explain binary operations and algorithms involving whole numbers, integers, and rational numbers.

3) Use, model, justify and explain concepts from number theory, including prime
numbers, composite numbers, factors, multiples, GCF, and LCM, as well as divisibility rules.

4) Identify correct and incorrect mathematical reasoning, and analyze error patterns present in EC-6 student work, and suggest remediation for these errors.

5) Write, and solve mathematical problems that involve enumeration and quantitative reasoning, and use mathematical modeling techniques in a variety of mathematical or non-mathematical settings.

6) Communicate mathematical ideas appropriately through multiple representations, including oral and written words, concrete manipulatives and pictures, graphs, tables, and symbols.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The syllabus will provide an outline of course topics, supported by the textbooks. Students are responsible for their own learning, using resources and technology.

The course will be a combination of lectures, individual, and group work.

Students are expected to participate in group and whole class discussions by contributing with knowledge and thoughtful evaluation of the contribution of others. A substantial portion of the class instructional plan will be using physical models to teach the content topics, and understanding how learning occurs through their use. Students will be using My Math Lab (online) to do a majority of their homework assignments.

H. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>25%</td>
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</tbody>
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I. COURSE CONTENT/SCHEDULE

Participation: Each student is expected to be fully involved in class. Absences will affect this part of your grade. Attendance will be recorded and counts 12.5% of your grade. The maximum number of unexcused absences allowed will be one for a class that meets only ten times during Summer 1. To be qualified to make up work, students need to email Mrs. Venzon within 24 hours of absence with reason for missing class. Some classwork cannot be made up. Please be present.

Quizzes & Chapter tests: There will be chapter tests some online and some in class, and a cumulative final. Grades will be posted in the gradebook of MyLabsPlus.

Portfolio: Each student should keep a portfolio, in a three ring binder with dividers and labeled tabs, representing the work they have done for the class. This portfolio will be submitted to the professor at the midterm and the end of the semester. Most homework will consist of in class assignments, which will be due by the next class period. This class is called a Blended course meaning that online work will count for 55 minutes each week of classtime (No class on Friday). Work will consist of readings and other activities.

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<thead>
<tr>
<th>DATE - WEEK)</th>
<th>TOPIC</th>
<th>CHAPTER(S)</th>
<th>ASSIGNMENTS</th>
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<tbody>
<tr>
<td>1</td>
<td>Problem solving</td>
<td>1.1-1.6</td>
<td></td>
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<tr>
<td>2-3</td>
<td>Fractions</td>
<td>6.1-6.4</td>
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<tr>
<td>4</td>
<td>Integers</td>
<td>5.1-5.3</td>
<td></td>
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<tr>
<td>4</td>
<td>Number Theory</td>
<td>4.1-4.3</td>
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<tr>
<td>4-5</td>
<td>Numeration and Computation</td>
<td>3.1-3.5</td>
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<tr>
<td>5</td>
<td>Sets and Venn diagrams</td>
<td>2.1-2.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Final Exam</td>
<td>July 2</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Cell phones, pagers, and earpieces: Please turn cell phones off during class. Please
remember to bring your calculator; no cell phones, pagers, or earpieces will be allowed in sight during quizzes and exams (please put them in your bag).

Written work: Written hardcopy assignments must be typewritten or neatly printed with pages stapled together (no folding, paper clips, or plastic covers please). The professor reserves the right to penalize sloppy, unorganized, unstapled, misspelled or poor grammatical work. The Writing Center is available for help with written assignments.

Late Work: Students are encouraged to always turn in work on time. However, if situations dictate that work will be late, please notify the instructor and turn it in as soon as possible. Late work deadlines and points awarded may be adjusted at the discretion of the instructor.

Make-up Work: In the case of an excused absence, make-up work may be allowed. Homework deadlines and points awarded may be adjusted at the discretion of the instructor. Students must email instructor within 24 hours of an absence with a reason in order to qualify to make up work. Some daily work cannot be made up because it happens in class.

Dropping the course: Should you find yourself in the situation where you are considering dropping the course, you are highly encouraged to discuss this matter with the instructor.

Registration: You are the only person responsible for your registration in this class. If for some reason you decide not to continue with the course, you will need to see your advisor or the registrar to drop the course. If you quit coming to class and do not drop, you will be assigned a grade based on the work you have completed, usually an F.

Help: The best source of help for this course is the people directly involved in this course: your peers or the professor, in class or during office hours. Don’t wait for the last minute to get HELP.

Attendance: Plan to attend all sessions. Students are expected to be present and on time for all class meetings. I assume pre and in-service teachers to be professional learners, with maturity to understand the importance of being present in the classroom. If you must be absent, please communicate with the instructor within 24 hours to be able to make up work. Not all work can be made up Email is encouraged marcia.venzon@tamucc.edu or you may call my office at 825-2844 and leave a message. You are responsible for any work missed. You can get free medical attention at the University Health Center (825-2601)

K. COLLEGE AND UNIVERSITY POLICIES

- Academic Integrity (University)
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at
  http://catalog.tamucc.edu/content.php?catoeid=10&navoid=313#Academic_Integrity
• Classroom/Professional Behavior

• Deadline for Dropping a Course with a Grade of W (University)
The grade of W will be assigned to any student officially dropping a course by Friday, June 19, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must be submitted. After June 19, 2015 a student will not be allowed to drop a course.

• Grade Appeals (College of Science and Engineering)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• Disability Services
Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual’s documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to http://disabilityservices.tamucc.edu/

Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is
subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

L. OTHER INFORMATION

Statement of Academic Continuity

In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students need to make certain that the course instructor has a primary and a secondary means of contacting each student.

GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.