Fundamentals of Mathematics I, SMTE1350.B01
Department of Mathematics and Statistics
Fall 2015

A. COURSE INFORMATION

Course number/section: SMTE 1350.B01
Class meeting time: MWF 9:00-9:50
Class location: CS 107
Course Website:

B. INSTRUCTOR INFORMATION

Instructor: Marcia Venzon
Office location: CI 367
Office hours: MW 10-11, Tuesday 11-2
Telephone: 361 825-2844
e-mail: Marcia.venzon@tamucc.edu
Appointments: By email or call office.

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, 7th 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.tamu.cc.mylabsplus.com. Technical number to call for problems is 1-888-883-1299. Sign in with your net ID (mine is mvenzon1) and ask for a new password (will be sent to your islander email.)
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 numeration 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>
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<tr>
<td>Quizzes</td>
<td>25%</td>
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<tr>
<td>Homework</td>
<td>25%</td>
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<tr>
<td>Presentations/Attendance</td>
<td>25%</td>
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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 class time (No class on Friday). Work will consist of readings and other activities.

<table>
<thead>
<tr>
<th>DATE - WEEK</th>
<th>TOPIC</th>
<th>CHAPTER(S)</th>
<th>ASSIGNMENTS</th>
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<tbody>
<tr>
<td>1-2</td>
<td>Problem solving</td>
<td>1.1-1.6</td>
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<tr>
<td>3-6</td>
<td>Fractions</td>
<td>6.1-6.4</td>
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<td>7</td>
<td>Integers</td>
<td>5.1-5.3</td>
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<tr>
<td>8-10</td>
<td>Number Theory</td>
<td>4.1-4.3</td>
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<tr>
<td>11-13</td>
<td>Numeration and Computation</td>
<td>3.1-3.5</td>
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<tr>
<td>14</td>
<td>Sets and Venn diagrams</td>
<td>2.1-2.4</td>
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<tr>
<td></td>
<td>Final Exam</td>
<td>Mon. December 7 8-10:30 am</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

Attendance/Tardiness
Attendance is very important in this class. I count absences for 12.5% of your grades. 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 are 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 or you may call my office at 825-2844. You can get free medical attention at the University Health Center 825-2601.

Late Work and Make-up Exams
Work can only be made up if your email me within 24 hours your reason for missing. Some classwork cannot be made up. Instructor may adjust points awarded at their discretion.

Extra Credit
There is not extra credit in this course. I do drop the two lowest homework grades

Cell Phone Use
Please turn off cell phones in class. You may not use its calculator on tests.

Laptop Use
Not necessary to this course.

Food in Class
Please do not bring food to class or drinks without tops.

Missed Exam
If you miss an exam I need to have an email with a legitimate reason for missing and a plan for making it up

Participation
Participation is very important in this class. We do class work every day.

Others
Written work must be typewritten or neatly printed.
Before you drop this course, be sure to discuss it with your professor.

K. COLLEGE AND UNIVERSITY POLICIES

• Academic Integrity (University)
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or
plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- Classroom/Professional Behavior
  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.

- Statement of Civility
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

- 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. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must be submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day 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
  The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute
  that provides comprehensive civil rights protection for persons with
  disabilities. Among other things, this legislation requires that all students with
disabilities be guaranteed a learning environment that provides for reasonable
accommodation of their disabilities. If you believe you have a disability requiring
an accommodation, please call (361) 825-5816 or visit Disability Services in
Corpus Christi Hall 116.

  If you are a returning veteran and are experiencing cognitive and/or physical
access issues in the classroom or on campus, please contact the Disability Services
office for assistance at (361) 825-5816.

  http://disabilityservices.tamucc.edu/

- 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.

L. OTHER INFORMATION
- Academic Advising
  The College of Science & Engineering requires that students meet with an Academic
Advisor as soon as they are ready to declare a major. The Academic Advisor will set
up a degree plan, which must be signed by the student, a faculty mentor, and the
department chair. Meetings are by appointment only; advisors do not take walk-ins.
Please call or stop by the Advising Center to check availability and schedule an
appointment. The College’s Academic Advising Center is located in Center for
Instruction 350 or can be reached at (361) 825-3928.
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.