SMTE 1351.001: Fundamentals of Math II  
Thursday 7:00-9:20 p.m. CS 107  
Fall 2018

A. COURSE INFORMATION

Course number/section: CRN 70906, SMTE 1351.001  
Class meeting time: Thursday 7:00-9:20 pm  
Class location: CS-107, and online components  
(unless specified otherwise by Course Schedule)  
Course Website: TAMU-CC Blackboard [https://bb9.tamucc.edu](https://bb9.tamucc.edu)  
Appointments: Please email me, and include information about your availability during the week you would like to meet with me.

B. COURSE INFORMATION

Instructor: Ms. Pragati Bannerjee  
E-mail: pragati.bannerjee@tamucc.edu  
Office: CI 308  
Office Hours: Tuesday/Thursday 5:00-5:30

C. COURSE DESCRIPTION

The conceptual framework for understanding and applying properties, models and operations related to various data systems in problem solving settings. This research-based course provides the conceptual framework for increased understanding and application of rational numbers, probability, and statistics. Communicating concepts, processes or solutions effectively, in oral and written forms, will be emphasized. Using physical models to teach the content topics and understanding how learning occurs through their use will be a substantial portion of the class instructional plan. The course will cover chapters 7, 9-10 in the textbook.

Extended Course Description  
This is a required mathematics content course addressed to future teachers.

D. PREREQUISITES for the COURSE

SMTE 1350: Fundamentals of Math I  
Corequisites: None.

E. TEXTS and OTHER SUPPLIES

Required Textbooks

- MyLabsPlus Access is required for this class. The hard copy of the textbook is not required (MyLabsPlus will give you access to a digital copy of the textbook).
- We recommend the same textbook used for SMTE 1350 *Mathematical Reasoning for Elementary Teachers* by Long, De Temple, and Millman 7th edition with MyMathLab Access, Custom Package for Texas A&M University Corpus Christi, Pearson Custom Publishing. Students will be required to have an access code for MyLabsPlus (needs to be purchased from our campus bookstore only if it is the first time students use it, otherwise the old access credentials used for SMTE 1350 should work – if associated with Long’s 7th edition).
The Website for MyLabsPlus is www.tamucc.mylabsplus.com. Students will use their Island ID as their username and either use a previous password or ask for a new one. The MyLabsPlus help line is 1 888-883-1299.

TEKS (http://ritter.tea.state.tx.us/rules/tac/chapter111/index.html)

Supplies: A graphing calculator TI 84 or TI 84 Plus, regular access to high speed internet and MS Office applications (e.g., Word, Power Point, Excel).

F. STUDENT LEARNING OUTCOMES AND ASSESSMENTS

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.

By the end of this course, students should be able to:

1. Use, model, justify and explain relationships, operations and algorithms involving rational numbers, ratios, proportions and percent; as well as compare and contrast proportional and non-proportional relationships.
2. Create, use and explain a variety of appropriate data displays (tables, charts, graphs) and basic descriptive statistics that summarize data sets; compare and contrast the various representations.
3. Create, use and evaluate simulations and models that explore simple and compound experimental probability events. Use, justify and explain appropriate counting techniques, including permutations and combinations, to determine theoretical probabilities. Discuss the similarities and differences between experimental and theoretical probabilities.
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 proportional, probabilistic, and statistical reasoning, as well as basic ideas of mathematical modeling, in a variety of mathematical or non-mathematical settings.
6. Communicate mathematical ideas appropriately through multiple representations, including oral and written words, concrete manipulative materials and pictures, graphs, tables, and symbols.

G. INSTRUCTIONAL METHODS and ACTIVITIES

This is a course with up to 24 percent online components, recommended only for highly disciplined students who can commit to a rigorous schedule of individual study. The in-class instructional activities are designed under the assumption that students will have completed their online assignments before coming to class. Those in-class instructional activities will build upon the mathematical content of the online assignments. Students will be required to justify their solutions and critique their peers’ solutions to problems publicly (i.e., in class, in front of their peers), give individual or group presentations, and participate in whole-class discussions and activities.
H. EVALUATION and GRADE ASSIGNMENT

Grades will be based on the percentage of total points the student earns. During the semester, for an approximation of your overall grade you may look in Blackboard/My Grades, the column Weighted Total. The exact overall grade will be known only at the end of the semester, when all the categories that compose the overall grade will be known. Coming to class prepared and actively participating in class activities and Blackboard Discussion Forum, learning each lesson and doing the homework on time will contribute to your success in this class. Labs will be unannounced, and contain problem sets from the current topics.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance &amp; Class Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Family Math Night</td>
<td>5%</td>
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<tr>
<td>Homework- MyLabsPlus</td>
<td>25%</td>
</tr>
<tr>
<td>3 In-Class Exams</td>
<td>30%</td>
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<tr>
<td>5 Lab Sets (Unannounced)</td>
<td>15%</td>
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<tr>
<td>Final Exam</td>
<td>20%</td>
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Final grades will be assigned according to the following table:

- Percentage Grade
  - ≥90.0%    A
  - ≥80.0%    B
  - ≥70.0%    C
  - ≥60.0%    D
  - Below 60% F

Specific directions for course activities/assignments (e.g., content, format, submission, deadlines, feedback) will be announced in class and/or posted on TAMUCC-Blackboard, at https://bb9.tamucc.edu/. Class participation will be graded based on attendance and your answers during class activities.
I. TENTATIVE COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Content &amp; Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/30</td>
<td>Chapter 7.1</td>
<td>Decimals and Real Numbers</td>
</tr>
<tr>
<td>8/30</td>
<td>Chapter 7.2</td>
<td>Computations with Decimals</td>
</tr>
<tr>
<td>09/06</td>
<td>Chapter 7.2</td>
<td>Computations with Decimals</td>
</tr>
<tr>
<td>09/13</td>
<td>Chapter 7.3</td>
<td>Proportional Reasoning</td>
</tr>
<tr>
<td>09/13</td>
<td>Chapter 7.3</td>
<td>Proportional Reasoning</td>
</tr>
<tr>
<td>09/20</td>
<td>Chapter 7.4</td>
<td>Percent</td>
</tr>
<tr>
<td>09/20</td>
<td>Chapter 7.4</td>
<td>Percent Exam 1</td>
</tr>
<tr>
<td>09/27</td>
<td>Chapter 8.1</td>
<td>Algebraic Expressions, Functions and Equations</td>
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<tr>
<td>09/27</td>
<td>Chapter 8.1</td>
<td>Algebraic Expressions, Functions and Equations</td>
</tr>
<tr>
<td>10/04</td>
<td>Chapter 13.1</td>
<td>Organizing and representing data</td>
</tr>
<tr>
<td>10/11</td>
<td>Chapter 13.2</td>
<td>Measures of center and variation</td>
</tr>
<tr>
<td>10/18</td>
<td>Chapter 13.2</td>
<td>Measures of center and variation, Exam 2</td>
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<tr>
<td>10/25</td>
<td>Chapter 14.1</td>
<td>Theoretical Probability</td>
</tr>
<tr>
<td>10/25</td>
<td>Chapter 14.1</td>
<td>Experimental Probability</td>
</tr>
<tr>
<td>11/01</td>
<td>Chapter 14.2</td>
<td>Principles of counting</td>
</tr>
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<td>11/08</td>
<td>Chapter 14.3</td>
<td>Permutations and Combinations</td>
</tr>
<tr>
<td>11/15</td>
<td>Chapter 14.3</td>
<td>Permutations and Combinations Exam 3</td>
</tr>
<tr>
<td>11/29</td>
<td>Chapter 14.4</td>
<td>Theoretical Probability</td>
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<tr>
<td></td>
<td>Review</td>
<td></td>
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<tr>
<td>12/13</td>
<td>Final Examination**</td>
<td>Location: CS-107 Time: 7:15-9:45 PM</td>
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*11/22 Thanksgiving Holiday  
** Date, location, and time for the final exam may change but a timely announcement will be made in class.

J. COURSE POLICIES

Attendance/Tardiness  
You are expected to attend every class session, and arrive on time. There is no make up for class activities, you need to be present to participate. All the absences will be considered “unexcused” unless you have an exceptional situation (e.g., documented illness, family situation), and you email the instructor about it.

Late Work and Make-up Exams  
Late assignments will not be accepted, unless exceptional circumstances prevent you from completing them. Extension of deadlines will be at the instructor’s discretion. Late assignments may result in partial or total loss of credit. There are NO make-ups for quizzes, exams or in-class activities. Two of the lowest grades for quizzes will be dropped (i.e., will not count toward the overall grade).

Extra Credit  
There will be no extra credit for this course.
Cell Phone Use
Please silence phones before coming to class. If you need to take a call, please go outside the classroom.

Laptop Use
In general, you cannot use your laptops during class activities or exams. For special circumstances (e.g., presentations), or special needs, please talk with the instructor.

Food in Class
Refrain from bringing food to class. For special needs or occasions, please talk with the instructor.

Missed Exam
Exceptional circumstances (e.g., documented illness, family situations) may be considered at the instructor’s discretion.

Participation
You are expected to come to class prepared every time, and participate in class activities.

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)
I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped.
from the class. 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.