COURSE SYLLABUS
MATH 257-C01, Math for Elementary Teachers 2
MWF, 9:00-9:50 am (3 credits)

Semester/Year: Spring 2008  Office: Shields 207B
Instructor: Estella Elliott  Office Hours: MTWF, 2-3 pm; R, 4-4:50 pm
Email: eelliott@csi.edu  Office Phone: 732-6823

Course Description: This course includes algebraic reasoning, functions, probability, introduction to statistics, geometry and concepts of measurement.

Prerequisite: Math 157 (Math for Elementary Teachers 1) with a grade of C or better or instructor permission.

Textbook and Supplies:
- Scientific calculator, compass, ruler, protractor.

Course Objective: Students who complete Math 257 will become more effective teachers of elementary school mathematics by gaining a better command of mathematical knowledge and skills in both reasoning and problem solving. The students will become more positive about and confident of the mathematical skills involved in teaching.

Outcomes Assessment: Assignments, chapter tests, and a comprehensive final exam will be used to assess how well students achieve the expected course outcomes. Exams as well as student evaluations will be analyzed to help improve curriculum and instruction for the course. Also, regular informal feedback will be solicited in an effort to improve the class as it progresses.

Students will demonstrate a working knowledge of the following processes and concepts:
  a. Reasoning algebraically, including use of expressions, equations, functions, and graphs
  b. Statistics, including representation and interpretation of data using statistical graphs, measures of central tendency and variability, and statistical inference
  c. Empirical probability
  d. Theoretical probability, including principles of counting
  e. Plane geometry, including points, lines and line segments, rays, angles and relationship of angles in plane figures
  f. Curves, polygons, and in the plane
  g. Figures in space
  h. Networks and Euler’s formula for planar networks and polyhedra
  i. Measurement processes in English and Metric systems
  j. Measurements and formulas for area, perimeter, surface area, and volume
k. The Pythagorean Theorem and applications
l. Transformations, Symmetries, and Tilings
m. Congruence principles and properties of triangles
n. Construction of geometric figures
o. Similarity principles and properties of triangles

As part of departmental analysis of outcomes in this course and its place in the Mathematics program, student completion of the pre-requisite, success in the current course, success in subsequent courses and student satisfaction will be reviewed by the instructor and the department chair. A report containing this information will be submitted by department faculty to determine what, if any, changes can be make to improve the course in terms of content, focus, and instruction.

**On-line Course Evaluation:** Students are strongly encouraged to complete evaluations at the end of the course. Evaluations are very important to assist the teaching staff to continually improve the course. Evaluations are available online at: [http://evaluation.csi.edu](http://evaluation.csi.edu). Evaluations open up two weeks prior to the end of the course. The last day to complete an evaluation is the last day of the course. During the time the evaluations are open, students can complete the course evaluations at their convenience from any computer with Internet access, including in the open lab in the Library and in the SUB. When students log in they should see the evaluations for the courses in which they are enrolled. Evaluations are anonymous. Filling out the evaluation should only take a few minutes. Your honest feedback is greatly appreciated.

**Policies and Procedures:**

- **STUDENTS WITH DISABILITIES:** Any student with a documented disability may be eligible for related accommodations. To determine eligibility and secure services, students should contact the coordinator of Disability Services, Candida Mumford, at their first opportunity after registration for a class. Appointments may be made or more information is available at (208)732-6260 (voice) or (208)734-9299 (TDD) or email cmumford@csi.edu.

- **LEARNING ASSISTANCE RESOURCES:**
  a. Instructor: If you need extra explanation, stop by my office during office hours or set up an appointment for help at another time.
  b. Textbook: Read and study the examples in your textbook.
  c. Free Peer Tutoring: Free tutoring is available at the Math Lab (Shields 207).
  d. VHS and DVD media: VHS and DVD media of the subject matter are available in the CSI Library (GRM 131).
  e. Study Groups: Study groups are a great way to learn. Organize one right away!

- **CHEATING:** Cheating is unacceptable. Students caught cheating will be given a 0% for that assignment or exam and may face further disciplinary action.

- **STUDENT BEHAVIOUR:** Refer to pages 14-16 in the CSI catalog.
• ATTENDANCE: All students are responsible for the material presented in class whether they are there or not. Dropping or withdrawing from the course is the student’s responsibility.

• COMMUNICATION: Email is the primary source of written communication with all CSI students. Messages from instructors and various offices such as Admission and Records, Advising, Financial Aid, Scholarships, etc. will be sent to the students’ CSI accounts (NOT their personal email accounts). It is the student’s responsibility to check their CSI email accounts regularly. Failing to do so will result in missing important messages and deadlines.

• COMPUTER LITERACY: Please refer to the 2007-2008 College of Southern Idaho Catalog under Computer Literacy in the section, “DEGREE AND CERTIFICATE REQUIREMENTS,” on page 25. This can also be found online at www.csi.edu.

• EXAMS: Regular exams will be given at the Campus Testing Center. The Twin Falls Center is located in the Meyerhoeffer Building, Room 230 and is open Monday through Thursday, 8:00 am – 9:30 pm; and Friday, 8:00 am – 5:00 pm. You must have a photo ID and arrive at least one hour before closing time. The exams will be available over a 3-day period beginning the day we review the test material in class. There will be no make-up exams given! If you have an unforeseeable and unavoidable emergency, I will replace that exam score with the final exam score, weighted to 100 points. The comprehensive final exam will be given in the classroom with the instructor present. A make-up final will not be granted under any circumstances.

• HOMEWORK: Homework will be assigned weekly and will be collected at the beginning of class the following Monday (or Wednesday if Monday is a holiday). Late homework will not be accepted under any circumstances! A random selection of problems will be graded from each homework assignment, with a total possible of 100 percentage points. The top ten homework scores will be averaged to give your final homework score.

**Homework Assignment Format**
**Math 257**

1. Use loose leaf paper.
2. Write on front of page only.
3. Write name, course title (Math 257-C01), and date assignment is due in top right corner of first page.
4. Circle or highlight final answer when possible.
5. Show the work necessary to complete each problem. If little, no, or incorrect work is shown, you will not receive credit for that problem, even if you have the correct answer.
6. Write legibly. If I cannot decipher your work, you will not receive credit.
7. Staple pages together in top left corner.
8. Fold assignment lengthwise with first page on inside of fold.
9. Write name, course title, and date assignment is due on outside of folded document.
• GRADING: 3 Exams worth 100 points each 300 points  
  Homework 100 points  
  Final Exam 150 points  
  Total Possible 550 points

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<thead>
<tr>
<th>Points</th>
<th>Grade</th>
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<tbody>
<tr>
<td>495-550</td>
<td>A</td>
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<tr>
<td>440-494</td>
<td>B</td>
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<tr>
<td>385-439</td>
<td>C</td>
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<tr>
<td>330-384</td>
<td>D</td>
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<td>0-329</td>
<td>F</td>
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Course Outline
(Tentative and subject to change at any time)

<table>
<thead>
<tr>
<th>Week</th>
<th>Sections</th>
<th>Topics</th>
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<tbody>
<tr>
<td>January 14-18</td>
<td>Intro, 8.1</td>
<td>Algebraic Expressions and Equations</td>
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<tr>
<td>January 21-25</td>
<td>8.2, 8.3</td>
<td>Functions, Graphing Functions in the Cartesian Plane</td>
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<td>January 28-February 1</td>
<td>9.1, 9.2</td>
<td>The Graphical Representation of Data, Measures of Central Tendency and Variability</td>
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<td>February 4-8</td>
<td>9.3</td>
<td>Statistical Inference, Review for Exam 1</td>
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<td>February 8, 11, 12</td>
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<td><strong>Take Exam 1 in Testing Center</strong></td>
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<td>February 11-15</td>
<td>10.1, 10.2</td>
<td>Empirical Probability, Principles of Counting</td>
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<td>February 18-22</td>
<td>10.3, 11.1</td>
<td>Theoretical Probability, Figures in the Plane</td>
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<td>February 25-29</td>
<td>11.2, 11.3</td>
<td>Curves and Polygons in the Plane, Figures in Space</td>
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<td>March 3-7</td>
<td>11.4</td>
<td>Networks, Review for Exam 2</td>
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<tr>
<td>March 10-14</td>
<td>12.1, 12.2</td>
<td>The Measurement Process, Area and Perimeter</td>
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<td>March 17-21</td>
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<td>Spring Vacation!</td>
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<td>March 24-28</td>
<td>12.3, 12.4</td>
<td>The Pythagorean Theorem, Surface Area and Volume</td>
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<td>March 31-April 4</td>
<td>13.1</td>
<td>Rigid Motions and Similarity Transformations</td>
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<td>April 7-11</td>
<td>13.2</td>
<td>Patterns and Symmetries</td>
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<td>April 14-18</td>
<td>13.3</td>
<td>Tilings and Escher-Like Design, Review for Exam 3</td>
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<td>April 18, 21, 22</td>
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<td><strong>Take Exam 3 in Testing Center</strong></td>
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<td>April 21-25</td>
<td>14.1, 14.2</td>
<td>Congruent Triangles, Constructing Geometric Figures</td>
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<td>April 28-May 2</td>
<td>14.3</td>
<td>Similar Triangles, Review for Final Exam</td>
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Final Exam – Wednesday, May 7, 8:00 am to 10:00 am