Course Syllabus

Course Name:
FOUNDATIONS OF NUMBERS AND OPERATIONS

Course Number: MATH 2008

Course Description:
This course is an Area F introductory mathematics course for early childhood education majors. This course will emphasize the understanding and use of the major concepts of numbers and operations. As a general theme, strategies of problem solving will be used and discussed in the context of various topics. Credit for this course is excluded from Area D of the Core Curriculum, and excluded from any Career Technological degree program. Fall, Spring, Summer. 3 credit hours.

Pre-requisites/Co-requisites: Prerequisite: Minimum grade of “C” or better in either MATH 1101, 1111, or 1113.

USG General Education Outcomes pertinent to this course:

Quantitative Reasoning and Mathematics: quantitative reasoning and mathematics will be characterized by logic, critical evaluation, analysis, synthesis generalization, modeling, and verbal, numeric, graphical, and symbolic problem solving.

Competence within the context of collegiate general education objectives is defined by the following outcomes:

- Ability to model situations from a variety of settings in generalized mathematical forms;
- Ability to express and manipulate mathematical information, concepts, and thoughts in verbal, numeric, graphical and symbolic form while solving a variety of problems;
- Ability to solve multiple-step problems through different (inductive, deductive and symbolic) modes of reasoning;
- Ability to properly use appropriate technology in the evaluation, analysis, and synthesis of information in problem-solving situations;
- Ability to shift among the verbal, numeric, graphical and symbolic modes of considering relationships;
- Ability to extract quantitative data from a given situation, translate the data into information in various modes, evaluate the information, abstract essential information, make logical deductions, and arrive at reasonable conclusions;
- Ability to employ quantitative reasoning appropriately while applying scientific methodology to explore nature and the universe;
- Ability to discern the impact of quantitative reasoning and mathematics on the sciences, society, and one's personal life.

ABAC Course Learning Outcomes:

Foundations of Numbers and Operations Course Outcomes:

All students will learn to:

1. Understand numbers, ways of representing numbers, relationships among numbers, and number systems.
2. Understand meanings of operations and how they relate to one another.
3. Compute fluently and make reasonable estimates.
4. Apply multiple problem solving strategies and understand how approaches to solutions related to one another.

INSTITUTIONAL ABSENCE

ACADEMIC DISHONESTY

MATH 2008 Foundations of Number and Operations
Spring 2013, CRN 30521 (TTh 11 - 12:15 pm)

Instructor: Avijit Kar


Office: King Hall, Room 8

Phone: 229-391-5107    email: akar@abac.edu    web-site: www.abac.edu/akar

Office Hours: MW 9-10 am and 11-1 am, TTh 12:30-1 pm and 2-3pm, F 9-10 am

Prerequisite: MATH 1101, MATH 1111, or MATH 1113 with a grade of C or higher. Designed for early childhood education majors (grades P-5) to be used in Area F.

MATERIALS: A notebook of completed assignments should be kept for daily study and test review.

Tests: There will be 4 in class tests and a mandatory final at the end of the semester. Homework and class problems will be strongly emphasized in the tests. The final is combination of free response and multiple choices and must be taken on the final exam date. Your lowest test score may be replaced by the final exam score if it is higher than the lowest test score.

Grading: The chapter tests will determine 60% of your grade, 20% will come from the final exam, and 20% will come from homework, quizzes, projects etc.

A = 90% - 100%,   B = 80% - 89%,   C = 70% - 79%   D = 60-69%
F = Below 60%.

Make-up Exams: There will be no make-up exams, quizzes, projects, or homework assignments. If an hourly exam is missed, the final exam will be substituted for the missed exam. Exceptions may be granted on an individual basis only if extreme circumstances render it necessary. These circumstances must be cleared with the instructor prior to testing.

Disabilities: Reasonable accommodations will be made to students who have proper documentation and inform the instructor at the beginning of the course. Learning disabilities should be brought to the instructor’s attention and arrangements made for special needs the first week of classes.

Attendance: Instructors will keep accurate attendance records and must report the individual number of absences with midterm and final grades. Whenever a student is absent, whether for official or personal
reasons, the student must assume responsibility and provide notice to the instructor, preferably in advance, for making arrangements for any assignments and class work missed because of the absence. However, final approval for make up work remains with the individual instructor.

**Math Departmental Classroom Expectations:**
- arrive for class with proper tools (textbook, notebook, pencil, calculator)
- keep personal phone out of sight and on silent during class time (speak with your instructor before class should you experience an emergency)
- refrain from cursing during class
- be in class on time (two tardies count as one absence)
- treat faculty in a kind and courteous manner
- complete assignments by the assigned due date
- be attentive and actively participate in class
- wear no hats or other head gear on exam day

**Faculty are expected to:**
- begin class on time
- be prepared for class (text book, markers, calculator, handouts)
- treat students in a kind and courteous manner
- provide students with a schedule of events

**Repercussions – students will be asked to leave class and will be marked absent for the day if:**
- they arrive in class without tools
- they are found sleeping, cursing, or engaging in disruptive behavior
- they are texting or receiving phone calls during class (except for emergencies)

All members of the ABAC community have an obligation to promote an atmosphere in which teaching and learning can take place in an orderly and efficient manner. To maintain this learning environment, individuals must refrain from behavior that disrupts the teaching and learning process. In order to assure the rights of all students to benefit from time spent in class, faculty members have the right and responsibility to excuse from a class session any individual whose behavior disrupts the teaching and learning process. Serious or continued infractions may result in referral of the student for disciplinary action by the student judiciary or appropriate administrative officer.

**Grades and Student Evaluations:** Students enrolled in classes in the School of Science and Mathematics will be expected to demonstrate an understanding of subject matter requiring higher order processing skills. Examination questions may include essay, synthesis, analysis, and application; as well as completion, multiple choices, true/false, and matching. Computational skills and drawing or diagramming may also be required. Learning disabilities should be brought to the instructor's attention and arrangements made for special needs the first week of classes
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<thead>
<tr>
<th></th>
<th>Tuesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>Jan 8</td>
<td>Introduction</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Sec 1-2, 1-3</td>
<td>Sec 1-1, 1-2</td>
</tr>
<tr>
<td>15</td>
<td>Sec 2-2, 2-3</td>
<td>17</td>
</tr>
<tr>
<td>22</td>
<td>Sec 2-4, 2-3</td>
<td>24</td>
</tr>
<tr>
<td>29</td>
<td>Test 1</td>
<td>31</td>
</tr>
<tr>
<td>Feb 5</td>
<td>Sec 3-2, 3-3</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>Sec 3-4, 3-5</td>
<td>14</td>
</tr>
<tr>
<td>19</td>
<td>Sec 4-2, 4-3</td>
<td>21</td>
</tr>
<tr>
<td>26</td>
<td>Test 2</td>
<td>28</td>
</tr>
<tr>
<td>March 5</td>
<td>Sec 6-1, 6-2</td>
<td>7</td>
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<tr>
<td></td>
<td>Spring Break</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Sec 6-3, 6-4</td>
<td>21</td>
</tr>
<tr>
<td>26</td>
<td>Test 3</td>
<td>28</td>
</tr>
<tr>
<td>April 2</td>
<td>Sec 7-2, 7-3</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Sec 8-1, 8-2</td>
<td>11</td>
</tr>
<tr>
<td>16</td>
<td>Sec 8-3, 8-4</td>
<td>18</td>
</tr>
<tr>
<td>23</td>
<td>Test 4</td>
<td>25</td>
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<td>April 30</td>
<td>Final Exam</td>
<td>May 2</td>
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