MATH 100 SURVEY OF MATHEMATICS
3 Credits
Time: Tuesday-Thursday, 5:30-6:45 PM

INSTRUCTOR: Kimlynne Lee Slagel
OFFICE: Mana’opono 110A
OFFICE HOURS: Tuesday 5:00-5:30 PM, Thursday 6:45-7:15 PM
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EFFECTIVE DATE: January, 2013

Windward Community College Mission Statement

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

Catalog Description

An introduction to quantitative and logical reasoning for the non-science/non-mathematics majors. The question, “What is mathematics?” is explored, while focusing on mathematical systems or models, cultivating an appreciation for mathematics as an aesthetic art, and developing skills in problem solving and analysis.

Activities Required at Scheduled Times Other Than Class Times

1. Completion of problem sets including those assigned online.
2. Manipulation of a scientific or graphing calculator.
3. Reading textbook in conjunction with weekly lectures.

Student Learning Outcomes

The student learning outcomes are:

1. Constructing diagrams that will facilitate the visual conception of a phenomenon or problem.
2. Utilizing basic properties and/or operations related to Set Theory, Logic, Statistics, Linear and Quadratic functions and Counting methods.
3. Employing symbolic/mathematical techniques to solve applied problems.
4. Utilizing precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

Foundation Hallmarks

1. The student will be exposed to the beauty, power, clarity, and precision of formal systems.
2. Instructors will help students understand the concept of proof as a chain of inferences.
3. Instructors will teach students how to apply formal rules or algorithms.
4. Students will be required to use appropriate symbolic techniques in the context of problem solving and in the presentation and critical evaluation of evidence.
5. The course will not focus solely on computational skills.
6. Instructors will build a bridge from theory to practice and show students how to traverse this bridge.

**Course Tasks**

The mode of instruction will be focusing on problem solving, logical and analytical thinking. The new material will be introduced by the instructor in every lecture, and then the student will apply the new material to problem sets. However, the goal for this procedure is not just getting the correct answer but to build the ability to explain how to obtain the solution and why the solution is correct. Students will be expected to work both independently and cooperatively in small groups.

**Assessment Tasks and Grading**

The student will demonstrate competency in the course objectives via weekly problem sets, in-class activities, and exams. Exams are to be taken within the classroom environment without any references unless otherwise stipulated by the instructor. Grades will be determined by the following weighted categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>5%</td>
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<tr>
<td>Problem Sets</td>
<td>15%</td>
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<tr>
<td>Exams/Final Exam</td>
<td>80%</td>
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</tbody>
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The overall semester grade is determined by the following scale.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage of Total Points Possible</th>
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<tbody>
<tr>
<td>A</td>
<td>90-100%</td>
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<tr>
<td>B</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79%</td>
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<tr>
<td>D</td>
<td>60-69%</td>
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<tr>
<td>F</td>
<td>below 60%</td>
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<tr>
<td>Cr</td>
<td>70-100%</td>
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<tr>
<td>NC</td>
<td>below 70%</td>
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<tr>
<td>W</td>
<td>Official withdrawal (must meet March 21, 2013 deadline)</td>
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<tr>
<td>I</td>
<td>“I” grade will be given only to students who are achieving passing grades and are very close to completing the course. In addition, the student must have a very good reason for not being able to complete all the work on time. Grade related excuses are unacceptable. Examples of extreme or unusual circumstances include a certified medical reason or a death of an immediate family member.</td>
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**Learning Resources and Materials**


*Thinking Mathematically, a custom edition for WCC, by Blitzer, Pearson/Prentice Hall

*Calculator (Scientific or Graphing). No specific make or model is required, however the instructor is
best versed in the use of the Texas Instrument brand (TI-83, 84, 89, or NSpire). Students are not required to purchase a textbook. An online electronic textbook is available with the purchase of MyMathLab. However, the textbook is available in electronic version only and cannot be printed from the internet. Problem sets will be assigned using MyMathLab. Students are not required to purchase a calculator, however, having a calculator available will eliminate a great deal of tedious calculations. Calculators are available when completing problem sets on MyMathLab. Calculator use is permitted on ALL exams.

Additional Information

- **Expectations**
  Students are to conduct themselves in a polite adult manner. Cell phones should be silenced during class lectures.

  Students are to complete all problems sets in a timely manner. Late homework will be graded with a maximum of 70% of the total points possible. Homework submitted after the unit is completed will not be awarded points.

  Students are encouraged to participate in class discussions, as this is an intricate part of learning the nuances of mathematics.

- **Exams**
  Students are to inform the instructor if he/she cannot attend class on a scheduled exam date. Students must email or call the instructor BEFORE the missed class session to schedule a make up exam. Make up exams will be written at The Testing Center (TTC), located in La'akea, the Library Learning Commons, during unscheduled class time. Check the TTC for hours of operation. Calculator use is permitted on all exams.

- **Attendance**
  Regular attendance is essential to the student’s success in the class. For this reason, class attendance will count 5% towards the semester grade.