MATH 100 – SURVEY OF MATHEMATICS (3 Credits)

INSTRUCTOR: Michael Joyce
OFFICE: Mana‘opono 110A
OFFICE HOURS: See website
TELEPHONE: To be announced
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WEBSITE: Mike: www.math.hawaii.edu/~mikejoyce
Pearson: www.coursecompass.com

EFFECTIVE DATE: Fall 2013

<table>
<thead>
<tr>
<th>CRN</th>
<th>DAYS</th>
<th>MEETING TIMES</th>
<th>CLASSROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>64048</td>
<td>MW</td>
<td>100-215</td>
<td>Mana‘opono 102</td>
</tr>
<tr>
<td>64049</td>
<td>TR</td>
<td>1130-1245</td>
<td>Mana‘opono 115</td>
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WINDWARD COMMUNITY COLLEGE MISSION STATEMENT

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai‘i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O‘ahu’s Ko‘olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

CATALOG DESCRIPTION

An introduction to quantitative and logical reasoning for the nonscience/nonmathematics major. 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 problemsolving and analysis. (3 hrs. lect.)

Prerequisite: Grade of “C” or better in MATH 25 or equivalent, satisfactory math placement test score, or consent of instructor.

WCC: FS

TOPICS COVERED IN THIS COURSE:

Functions (linear and quadratic) • Set Theory (universal, union, compliment, intersection, and empty set) • Logic (negation, conjunction, disjunction, and conditional statements, truth table, valid statement, Euler’s diagram) • Counting Theory and Probability (counting principle, permutation, combination, odds) • Statistics (Normal distribution, standard normal distribution, percentile, z-score)
LEARNING RESOURCES & MATERIALS

The required textbook for this course is “Thinking Mathematically” 5th ed, by Blitzer. Please consult the WCC bookstore for precise information. When buying a hard copy of this textbook, please make sure that it comes with a valid access code. Purchase of this textbook is not required since all of the material including the e-book (digital textbook) is available online (although it can be awkward to use in this manner). Buying just an access code may be cheaper than buying the textbook with code. Everything you need for this course is available online at the coursecompass.com website. We will utilize most of the tools available through this website. You must get a CourseCompass access code for this course. You can get this one of two ways: Buy it directly when registering for the course online or buy the textbook at WCC bookstore which comes with the access code.

GETTING STARTED WITH THE ONLINE COMPONENT OF THIS COURSE

1. Go to www.coursecompass.com and click on student under register.

2. Enter the Course ID “joyce47677” for the MW class and “joyce34062” for the TR class when required. Please don’t mix these up! (Note: the exact info will be available by the first day of classes.)

3. Follow the online instructions to complete the registration process.

4. There will be an option to either buy an access code or enter the one that came with your textbook.

5. For video tutorial use this link: http://tours.pearsoncmg.com/smscc/index.html

6. Note that you may need to turn off pop-up blocker so that some plug-ins can be installed.

7. For technical problems call Tech Support at 800-677-6337, Monday – Friday 9am – 6pm EST.

8. You can also talk to live tutor via toll free 888-777-0463, Sunday to Thursday 5pm – 12am EST.

STUDENT LEARNING OUTCOMES

1. Construct diagrams that will facilitate the visual conception of a phenomenon or problem.

2. Utilize basic properties and/or operations related to Set Theory, Logic, Statistics, Linear and Quadratic functions and Counting methods.

3. Employ symbolic/mathematical techniques to solve applied problems.
4. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

Note: All SLOs assessment are embedded in class activities, homework and exams.

**FOUNDATION HALLMARKS**

Math 100 fulfills the three credits General Education Requirement for Foundations Symbolic for both the AA degree at WCC and a Bachelor’s degree at UH Manoa as well as UH West Oahu. Consequently, it meets the hallmarks of the symbolic reason requirement listed in the catalog.

**COURSE TASKS & GRADING**

Grades for this course are based on the following:

<table>
<thead>
<tr>
<th>Task</th>
<th>Points</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>3 exams @50 pts</td>
<td>150</td>
<td>37.5%</td>
</tr>
<tr>
<td>Course Activities</td>
<td>150</td>
<td>37.5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
<td>400</td>
<td></td>
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Course activities include, but are not limited to, homework problems and in-class activities (quizzes).

Each letter grade for the course will be assigned according to the level of achievement as provided in the table below:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A</td>
<td>90% - 100% of the cumulative points possible</td>
</tr>
<tr>
<td>B</td>
<td>80% - 89% of the cumulative points possible</td>
</tr>
<tr>
<td>C</td>
<td>70% - 79% of the cumulative points possible</td>
</tr>
<tr>
<td>D</td>
<td>60% - 69% of the cumulative points possible</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60% of the cumulative points possible</td>
</tr>
<tr>
<td>CR</td>
<td>70% - 100% of the cumulative points possible</td>
</tr>
<tr>
<td>NC</td>
<td>Less than 70% of the cumulative points possible</td>
</tr>
<tr>
<td>W</td>
<td>Official Withdrawal</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete - given when a student has failed to complete a SMALL part of the course due to circumstances beyond his/her control.</td>
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Note: Suppose you have 150/150 on the homework (and you should because you can hit “Similar Exercise” as often as you need!). Then you can get 60% on all the tests (which is a low D/high F) which is 150/250 on the rest and end up with 300/400, that is 75% and a strong C. DOING THE HOMEWORK IS CRUCIAL IN THIS COURSE!
**N grade:** "The 'N' grade indicates that the student has worked conscientiously, attended regularly, finished all work, fulfilled course responsibilities, and has made measurable progress. However, either the student has not achieved the minimal student learning objectives and is not yet prepared to succeed at the next level, or the student has made consistent progress in the class but is unable to complete the class due to extenuating circumstances, such as major health, personal or family emergencies." If you would like to request for N grade in this class, you must provide a formal letter of request to me no later than the time of final examination addressing how you have met the criteria for N grade. Then I will make a decision on whether or not you qualify for the N grade. Definition of additional grade options such as “I” can be found in WCC catalog.

**Note:** CR/NC grades require written instructor consent. Students must apply for CR/NC grading option at the Admissions Office by the posted deadline. If a student does not apply for CR/NC grading option at the Admissions Office by the required deadline and if s/he does not withdraw, a letter grade (A, B, C, D, F) will be assigned for the course.

**Note:** W grade is given only when the student officially withdraws from the course at the Admissions Office by the posted deadline.

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**Email and Laulima Website**

Students are responsible for checking their UH email regularly for important announcements. Students are also expected to check the Math 100 Laulima site for announcements and occasionally additional resources.

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**ADDITIONAL INFORMATION**

1. **EXAMS:**

   There will be three exams for this course, worth 50 points each and one comprehensive (cumulative) final worth 100 points. The best way to prepare for the exam is to study the associated homework problems along with the exam review (which will be given in class). There will be no retests for these exams. A student who misses an exam must have a valid documented excuse and if so that exam will be removed from the grading scheme for that student.

   **Note:** You may bring a non-graphing calculator and a 3 inch by 5 inch index card with notes on both sides to all exams, including the final exam.
2. HOMEWORK:

All homework assignments and relevant due dates are available online on the Pearson website. I encourage you to work together on homework. In addition, there are “help me solve”, “view similar example”, and “watch lecture video” options available. Note that you can work on each homework problem as many times as necessary by clicking the “similar exercise” tab, till you get it right. So, it is possible for you to get 100% on each homework assignment (which really helps your grade). To receive additional help on the homework, students are welcome to come by my office during the office hours, to go to the math lab or to make an appointment for consultation.

3. IMPORTANT INFORMATION:

Please check your @hawaii.edu e-mail account frequently for important announcements. This syllabus is subject to change in extenuating circumstances. Students must complete all online homework assignments and exams including the final within this Fall 2013 term. For important academic information refer to WCC website www.windward.hawaii.edu or go to www.hawaii.edu for system wide information. Plagiarism, or copying and use of another’s work without proper acknowledgment, is not permitted and may result in failing grade for the course. Make-up for any missed exams or quizzes are not allowed after the due date.

4. GETTING HELP:

I encourage you to stop by my office anytime you need help. You may also use the Math Lab in the Library Learning Commons building, room 226. You may get additional help by utilizing the websites below or going to any UH campus math lab.

http://manoa.hawaii.edu/ola - Provides free local live interactive tutoring during weekdays

http://www.khanacademy.org – Provides small lecture videos on selected topics

www.wolframalpha.com – Provides computational tools, facts, and examples.

http://www.graphcalc.com - A free graphing calculator utility can be downloaded here.

6. CONTACT:

The following methods will be used to communicate:

You can send me an e-mail anytime and I will do my best to respond within 24 hours (often much sooner). This is an effective method of communication if you expect a short response.
If you go to Windward Community College or live nearby, you can stop by my office anytime during my office hours or make an appointment to see me. This is a good way to get help with homework problems.

The online discussion board can be used to interact with classmates by asking homework questions and answering previously posted problems.

Note: Your instructor is your primary human resource for help when you are lost or having trouble. Seek help immediately if you are encountering problems even after reading and re-reading the text section(s) and listening to/thinking about the discussion in class on that section(s). See the instructor during office hours, make an appointment, email or call. Don't wait too long to get help!! The Math Lab tutor is also available for drop-in assistance on the course material.

If a crisis comes up that interferes with the class, communicate with your instructor in a timely manner. Too many students wait until it is too late to inform their instructor about their crisis and that reduces the options that students may have to complete the course with a grade of C or better or to receive a CR grade.

7. Remember that this is partially an online course. The CourseCompass program is very interactive, includes a textbook, video links, worked examples, etc. You will often be teaching yourself with these aids. Explaining math over the phone is not very easy and understanding it over the phone is worse. You will need to be dedicated and organized to succeed in this class.

**DISABILITIES ACCOMMODATION STATEMENT**

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.

**IMPORTANT DATES**

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>Aug 26</td>
<td>Late registration and add/drop period begins</td>
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<tr>
<td>Aug 30</td>
<td>Late registration and in-person add/drop ends</td>
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<td></td>
<td>Last day for 100% refund of tuition/student fees</td>
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<tr>
<td>Sept 16</td>
<td>Last day for 50% refund of tuition/student fees</td>
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<td></td>
<td>Last day for erase period</td>
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<tr>
<td>Nov 4</td>
<td>Last day to withdraw with a &quot;W&quot; or choose CR/NC grade option</td>
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<tr>
<td></td>
<td>Last day to make up &quot;I&quot; grade from fall semester</td>
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