# MATH 103 - COLLEGE ALGEBRA - 4 credits MWF 10:00 a.m. - 11:15 a.m.

INSTRUCTOR: Jean Okumura OFFICE: Mana`opono 112A

OFFICE HOURS: WF 11:30 a.m. – 12:30 p.m.

TR 10:00 – 11:30 a.m.

Other Hours by Appointment

**TELEPHONE:** 236-9282

FAX NUMBER: 247-5362 Attention: Jean Okumura

EMAIL ADDRESS: jokumura@hawaii.edu

**EFFECTIVE DATE:** Spring 2014

MYMATHLAB (MML) COURSE ID: okumura20868

# **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**

Linear equation, inequalities, systems of equations, polynomial functions, fractional expressions and equations, exponents, powers, roots, quadratic equations and functions; rational, exponential and logarithmic functions. (4 hrs. lecture)

PREREQUISITES: Grade of "C" or better in Math 25 or equivalent, satisfactory placement test

score, or consent of instructor.

WCC: FS

# **Suggested Basic Skills**

Good study skills and habits; Competency with Elementary Algebra; Diligence and persistence.

# **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, <a href="lemke@hawaii.edu">lemke@hawaii.edu</a>, or you may stop by Hale 'Akoakoa 213 for more information.

## **Learning Resources and Materials**

Required Text: College Algebra, 9th ed. by Sullivan

Required Material: MyMathLab (MML) access code

MyMathLab (MML) Course ID: okumura20868

MATH LAB: La'akea 226 – free drop-in tutorial assistance

THE TESTING CENTER (TTC): La'akea 228 – phone number 235-7498

UH Manoa Online Learning Academy: http://manoa.hawaii.edu/ola/

Free online tutorial assistance M – F: 9 am to 10 pm and Sundays: 5 to 10 pm

Brainfuse: http://windward.hawaii.edu/Brainfuse/

Free online tutorial assistance accessed via the MyUH portal.

## MyMathLab (MML)

This course will utilize MML for many homework assignments. The new textbook purchased from the WCC bookstore is packaged with MML. If you purchase the textbook from elsewhere, be sure that it comes with the MML access code.

The MML access code also provides an e-book so if you prefer, you may purchase the MML access code online for \$93.50.

#### **FOUNDATIONS HALLMARKS**

Math 103 fulfills the 3 credits General Education requirement for Foundations: Symbolic for both an A.A. degree at WCC and a Bachelor's degree at UH Manoa or UH West Oahu. Consequently, it meets the following hallmarks of the symbolic reasoning requirement

- 1. Students 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.

#### STUDENT LEARNING OUTCOMES

These student learning outcomes will be assessed via course activities (homework, in-class work, and/or additional assignments) and via tests or quizzes.

- 1. Demonstrate proficiency in writing math expressions into different forms.
- 2. Employ algebraic techniques to find the solutions to equations and/or inequalities, using complex numbers where appropriate.
- 3. Use algebraic techniques to analyze and solve applied problems.
- 4. Interpret equations geometrically and use geometrical information to obtain the equation of lines and circles.
- 5. Utilize introductory function concepts and draw the graphs of selected functions.
- 6. Utilize the definition of a logarithm and the properties of logarithms to simplify logarithmic expressions or to solve logarithmic and exponential equations.
- 7. Demonstrate proficiency in solving systems of linear and second degree equations and inequalities.
- 8. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form.

#### **Course Goals**

- 1. To provide the student with mathematical background necessary to pursue advanced work in mathematics and in other areas.
- 2. To provide the student with fundamental concepts, properties, and applications of college algebra.
- 3. To provide the student with an introduction to functions.
- 4. To extend the student's understanding and ability to apply algebraic concepts beyond the level of elementary algebra.
- 5. To promote greater student appreciation and awareness of the role of algebra in the environment and culture.

# **Activities Required at Scheduled Times Other Than Class Times**

Homework; quizzes; some exams; consultation with instructor.

It is expected that students spend, at the minimum, 12 hours per week outside of class time studying, attending SI sessions, and doing homework and readings for this class.

# **Responsibilities of Students**

Success in this course will be enhanced by:

- 1. A positive, inquiring attitude toward mathematics;
- 2. Setting aside adequate time for studying, working on problems, and careful cogitation of the material:
- 3. Reading the text carefully and making use of other learning materials whenever necessary;
- 4. Seeking assistance from the instructor and the Math Lab whenever necessary;
- 5. Regularly attending class and, notifying the instructor of an absence and responsibly obtaining and completing assignments by the designated date.

#### **Email and Laulima Website**

You are responsible for checking your UH email regularly for important announcements. You are also expected to check the Math 103 course homepage at the Laulima website for important resources for the course.

### **Supplemental Instruction**

This course might utilize Supplemental Instruction (SI). If we are able to get an SI leader for this class, then students are expected to attend 2 one-hour sessions or some combination totaling 2 hours per week arranged by the SI leader for additional help. A minimum of one hour per week in SI session is required.

If you are already committed to other activities during SI sessions and cannot rearrange your schedule to attend an SI session at the minimum one hour per week then please discuss your situation with the SI leader.

## **Academic Honesty**

All quizzes and exams are closed books and notes and must be done by your individual effort unless otherwise indicated by the instructor. You may not consult with any classmates while taking quizzes or exams. You are not allowed to tell a friend the type of questions on the quiz or exam, the answers, or help a classmate in any way (e.g. by explaining how to solve the problem). This would fall under the guidelines of academic integrity and any evidence of cheating will result in a score of 0 for all parties involved. Also keep in mind that we are assessing your knowledge and understanding of the concepts and strategies — attempting to find the answers online or through other sources is not in the spirit of academic honesty. An "F" will be assigned to students involved in **cheating** and the situation will be reported to the Dean and/or Vice Chancellor.

Graded assignments that apply to the course activities portion of your grade may be discussed with your classmates and you may seek guidance from the instructor, the SI leader, the Math Lab tutors, or the Trio tutors (if you are a Trio client), however, the write up of the solution for each problem must be done on **your individual effort** unless otherwise specified by the instructor. Graded assignments are **not group assignments** where all members of the group write the same responses for each problem. Any evidence of plagiarism will result in a score of 0 for all parties involved. If plagiarism persists, then an "F" will be assigned to the students involved in **plagiarism** and the situation will be reported to the Dean and/or Vice Chancellor.

All students are required to follow the Student Conduct Code described at <a href="http://www.hawaii.edu/apis/ep/e7/e7208.pdf">http://www.hawaii.edu/apis/ep/e7/e7208.pdf</a>.

# **Disruptive Behavior**

**Disruptive Behavior** leads to a loss of learning time. Examples are activated beepers and cell phones, texting messages, making offensive remarks, packing books before class is over, making noise, leaving class early, coming to class late, sleeping in class, prolonged chattering, reading other materials not relevant to this class, etc. If a student takes part in disruptive behavior, the instructor reserves the right to exclude the student immediately from the class meeting, and will be marked absent.

Remember that class time is learning time. Also, be respectful of others and their learning time.

# **Course Tasks and Grading Information**

Grades for this course are based on the following course tasks:

4 exams @100 pts	400 pts	(62% of possible pts)
Course Activities	125 pts	(19% of possible pts)
(Total % correct)(125) = pts for CA or		
if have SI - 100 pts for CA, 25 pts for SI		
& (Total % correct)(100) = pts for CA		
Final Exam	<u>125 pts</u>	(19% of possible pts)
Total points	650 pts	

Course activities may include but are not limited to:

MML Homework

Journal entries (writing assignments)

Reports or Presentations

SI Attendance/Participation (25 points)

Other Problems/Activities/Worksheets

In-class pop quizzes

There are no make-up opportunities for missed or late assignments, in-class activities, pop quizzes or other activities that are graded for the course activities portion of your grade. However, you will have 5 one business day late graces (LG) for the written homework for course activities. There also will be a few opportunities to earn extra credit points for the course activities portion of your grade. The total percent correct will be multiplied by 125 (or by 100 if we have SI) and will be rounded to the nearest whole number to obtain your score for the course activities portion of your grade. The <a href="maximum">maximum</a> score for the course activities portion of your grade is 125 points (100 points if we have SI).

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

Letter Grade	<u>Definition</u>
Α	90% - 100% of the cumulative points possible
В	80% - 89% of the cumulative points possible
С	70% - 79% of the cumulative points possible
D	60% - 69% of the cumulative points possible
F	Less than 60% of the cumulative points possible
Cr	70% - 100% of the cumulative points possible
NC	Less than 70% of the cumulative points possible
W	Official Withdrawal
I	Incomplete - given when a student has failed to complete a SMALL part of the course due to circumstances beyond his/her control.

Note: Cr/NC grades require written instructor consent. Students <u>must</u> 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, E) will be assigned for the source.

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.

### **Additional Information**

#### 1. ABSENCES:

It is your responsibility to attend class. If you are absent, borrow a classmate's notes and copy them for the day you were absent. You are responsible for those topics and examples discussed on the day of your absence. Furthermore, you are responsible for any important announcements or homework assignments given during the class you missed. Frequent absences can negatively affect your grade.

### 2. MAKE-UP POLICY:

There are no make-up opportunities for any quizzes, graded assignments, or graded inclass activities that you miss due to absences or tardiness. A few extra credit opportunities may be available for the course activities portion of your grade. You will have 5 one business day late graces (LG) for the written homework for course activities.

If you are unable to attend class on an exam day, discuss your situation with the instructor as soon as possible before the exam day. It may be possible for you to take the exam earlier than the specified day/time. IF YOU UNEXPECTEDLY MUST BE ABSENT ON AN EXAM DAY, NOTIFY THE INSTRUCTOR BY THE END OF THAT EXAM DAY. YOU CAN LEAVE A VOICE MAIL MESSAGE FOR THE INSTRUCTOR (236-9282). BE SURE TO STATE THE REASON FOR THE ABSENCE. If no notification is received by the day of the exam or if the reason is not justified, then you will receive a 0 for that exam and no make-up will be allowed. If notification is received and the reason is justified then a make-up exam will be scheduled. You must take the make-up exam as soon as possible after you return to school. The instructor has the right to request documentation of the student's absence and determine if the reason for the absence is justified. FOR EACH STUDENT, NOT MORE THAN ONE MAKE-UP EXAM MAY BE TAKEN.

- 3. There are NO RETESTS for this course.
- 4. FINAL EXAM: The final exam is cumulative.

#### 5. CALCULATOR:

No calculator is allowed for quizzes or exams. A calculator may be used for homework as needed.

#### 6. CELL PHONES:

Please put your cell phone on silent mode or turn it off prior to the start of the class so that it does not disturb the class session. Put your cell phones away during class time. NO TEXTING is allowed during class time.

## **Additional Information (continued)**

#### 7. HOMEWORK:

Read the sections to be covered in a class session prior to that class session. As you read each section, write down terminology or symbols and its definition and properties/rules that are important. Do the Concepts and Vocabulary section at the end of the section. Answers are available in the back of the text. This will become helpful additional notes. Do the "Now Work" problems and check your answers in the back of the text. Although the Concepts and Vocabulary section problems and the "Now Work" problems are not collected for grading purposes, a pop quiz on these problems may be given to see if you have done them.

After the class lecture/discussion on a section, you should complete the MML homework from those sections. Those problems and concepts that you still do not understand or that you need further clarification on should be asked about in the class meeting after the section is discussed in class or during SI session. Because there is very little class time, you will probably need to seek assistance from the instructor, SI leader or from the Math Lab if not all your questions on problems are handled during class time or if you are still having difficulties. Complete, review, and analyze as much of the MML homework problems to help you learn and get a better understanding of the material. You may need to do more than the MML homework problems to become comfortable with the concepts and skills. Select odd numbered problems from the section exercises in the textbook and/or do study plan problems from MML for additional practice.

After the section(s) are covered in class, additional activity sheets or worksheets that count towards the course activities (CA) portion of your grade may be given with a due date. Course activities may also include other activities such as journals (writing assignments), oral presentations, etc.

Any item collected for grading purposes for the course activities portion of your grade are due at the <u>BEGINNING OF CLASS</u> unless otherwise specified by the instructor and <u>WILL NOT RECEIVE ANY POINTS IF TURNED IN LATE</u>. However, you will have 5 one business day late graces (LG) for written homework for course activities. You may turn in your graded work before the due date and/or time without losing points. There may be a few opportunities to earn some extra credit points towards your course activities portion of your grade.

Although there are usually no points associated with MML study plan problems or additional problems that you do from the text or on handouts that have answers provided as a way to practice the strategies learned, it is expected that students do some additional problems to assist them in their learning. Not doing additional non-graded problems and/or waiting to work on additional non-graded problems until right before an exam generally results in poor exam results and a lack of success or minimal success in this course.

Be sure to review and analyze your graded course activities after it is returned to you. This will help you to get a better understanding of the material and concepts.

# **Additional Information (continued)**

### 8. HELP:

Your instructor (and SI leader, if we have one) 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. You could also make an appointment, email or call the instructor( or SI leader if we have one). Don't wait too long to get help!! The Math Lab 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.

# 9. GRADING ON HOMEWORK, QUIZZES, OR EXAMS:

To receive full credit for problems done on exams, on quizzes, or for graded course activities, you must show sufficient work in a clear, logical, mathematically precise and organized manner. This is to assess student learning outcome #6 and Foundations Hallmark #4. It also helps me determine where your error is (hence, you might be able to obtain partial credit) and if you are logically applying the mathematical tools learned to solve the given problem. Your work must be neat and organized. "Messy" and/or disorganized work will not be accepted.

#### 10. DON'T PROCRASTINATE

Mathematics is not a subject that you can consistently be successful in by "cramming" a day or two before the test. By "cramming" you don't develop proficiency in doing the problems, knowledge of what to do on a particular problem and long-term understanding of the process. Also, if you procrastinate, you may fall so hopelessly behind that it becomes impossible to catch up. It requires constant work to keep on top of the material.

#### 11. N Grade

The N grade indicates that the student 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."

The N grade is an optional grade. Instructors do not have to give an N grade.

# TENTATIVE SCHEDULE - MATH 103 SPRING 2014 – OKUMURA MWF 10:00 am -11:15 am

	MONDAY		WEDNESDAY		FRIDAY
JAN 13	Intro, R.1 – Interval Notation & Compound Inequalities	JAN 15	R.2	JAN 17	R.3, R.4  Last Day for 100% Refund
JAN 20	HOLIDAY: Martin Luther King Day	JAN 22	R.5	JAN 24	R.7
JAN 27	R.8	JAN 29	1.1	JAN 31	1.7 - Part 1
<b>FEB</b> 3	1.7, 1.2 <b>Erase &amp; 50% Refund</b> <b>Deadline</b>	FEB 5	1.2, 1.7 – Part 2	FEB 7	1.3
FEB 10	Review Exam 1	FEB 12	EXAM 1 !!! Ch R, 1.1, 1.7	FEB 14	1.4
FEB 17	HOLIDAY: President's Day	FEB 19	1.4, 1.5	FEB 21	4.5, 5.4
FEB 24	1.6	FEB 26	2.1. 2.2	FEB 28	2.3
MAR 3	2.4	MAR 5	Review Exam 2	MAR 7	No Class - Conference <b>Exam 2 in TTC</b> - <b>1.2</b> - <b>1.7, 2.1, 2.2, 4.5, 5.4</b>
MAR 10	2.5	MAR 12	3.1	MAR 14	3.1, 3.2
MAR 17	3.2, 4.1	MAR 19	4.3 <b>W &amp; CR/NC Deadline Thurs. 3/20</b>	MAR 21	5.2, 5.3
MAR 24	NO CLASSES: Spring Recess	MAR 26	NO CLASSES: Spring Recess	MAR 28	NO CLASSES: Spring Recess
MAR 31	5.2, 5.3	APR 2	6.1	APR 4	6.3, 6.4
APR 7	6.4, 6.5	APR 9	Review Exam 3	APR 11	EXAM 3 !!! 2.3-2.5, 3.1, 3.2, 4.1, 4.3, 5.2, 5.3, 6.1
APR 14	6.5, 6.5	APR 16	6.6, 8.1	APR 18	HOLIDAY: Good Friday
APR 21	8.1	APR 23	8.1, 8.6	APR 25	8.6. 8.7
APR 28	8.7	APR 30	Review Exam 4	MAY 2	EXAM 4 !!! 6.3-6.6, 8.1, 8.6, 8.7
MAY 5	Final Exam Review	MAY 7	Final Exam Review	MAY 9	No Class Study for Final Exam
MAY 12	FINAL EXAM!!! 10 am-12 noon				

## GRADING INFORMATION MATH 103 – OKUMURA

Grades for this course are based on the following:

4 exams @100 pts 400 pts (62% of possible pts) (19% of possible pts) Course Activities (CA) 125 pts

(Total % correct)(125) = pts for CA or if have SI - 100 pts for CA, 25 pts for SI & (Total % correct)(100) = pts for CA

(19% of possible pts) Final Exam 125 pts

Total points 650 pts

Course activities may include but are not limited to:

MML Homework or Media Assignment In-Class Problems

Journal entries (writing assignments) Other Problems/Activities/Worksheets

Reports or Presentations In-class pop quizzes

COURSE ACTIVITIES THAT ARE TURNED IN LATE WILL NOT RECEIVE ANY POINTS (no matter what the reason). All assignments are due at the BEGINNING of class unless otherwise specified by the instructor. The "beginning of class" means that assignments must be given to the instructor by 5 minutes after the start of class. For example, since the class meets 8:30 - 9:45 then, the assignment must be turned in by 8:35. The clock of the classroom is used to determine the time. Any homework turned in after 8:35 is considered late.

There are no make-up opportunities for missed assignments, quizzes or in-class activities or other activities that are graded for the course activities portion of your grade. However, you will have 5 one business day late graces (LG). There also will be a few opportunities to earn some extra credit points for the course activities portion of your grade. The total percent correct will be multiplied by 125 (rounded to the nearest 0.5) to obtain your score for the course activities portion of your grade. If we have SI, then the total percent correct will be multiplied by 100 instead of 125. However, the maximum score for the course activities portion of your grade is 125 points (or 100 points if we have SI).

Office: Jean Okumura Mana'opono 112A Instructor:

WF: 11:30 am – 12:30 pm Office Phone: 236-9282 Office Hrs:

10:00 - 11:30 am jokumura@hawaii.edu Email: School Fax Number: 247-5362 Other hours by appointment

Attention: Jean Okumura