Course Syllabus (Spring 2014 Semester)

Math 28 — Developmental Mathematics II (3 Credits) – Lecture Based

INSTRUCTOR: Navtej (Johnny) Singh E-MAIL: navtej@hawaii.edu < Reference Your Name and Class Information When E-mailing> OFFICE: Manaopono 110 OFFICE HOURS: M W 7:30a – 8:30a, 11:15a – 11:45a; T 12:30p – 1p, 2:15p – 2:45p; and by appointment. TELEPHONE: (808) 236 – 9278 <Use this during office hours for instant communication>

CRN	Course ID for M	IML Class	Meeting	Days	Classroom
60346		10:00a	am – 11:15am	M W F*	Manaopono 103

*Note that Friday time slot is designated for mandatory Supplement Instruction.

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 and Course Content

This course is a continuation of Developmental Mathematics I and a preparation for students to take Math 100, Math 101 or Philosophy 110 to fulfill the Symbolic Reasoning requirement. Topics include an introduction to Real numbers (including basic roots, signed numbers and properties) and algebraic expressions (including geometric formulas), linear equations and inequalities in one variable, linear equations and inequalities in two variables, and selected topics - Quadratic Formula, parabola, systems of equations and inequalities, scientific notation, and variation. Pre-requisites: Grade of "C" or better in MATH 19, MATH 22 or MATH 24 or equivalent; satisfactory math placement test score, or consent of instructor.

General Course Structure

This is a **lecture** based Math course that uses computer software and customized homework. If you learn Math best through lecture based course then this course is recommended for you. If you learn best at you own pace with aid from instructor and software, then you may want to consider taking self-paced math 28 course. The course begins with review material that is essential to be successful in this class. The course material is divided into four modules. Class time will be used to answer students' question and then lecture on new material. During the Supplemental Instructor Session, students work on the assigned homework with help from the SI Leader. Supplemental instructor will meet one-on-one with each student to check progress and to provide help.

Learning Resources and Materials

Required Textbook for this course is "Beginning Algebra", 11th edition, by Lial, Hornsby and McGinnis. Make sure your textbook come with a valid access code for MyMathLab (MML). Access to e-textbook is available at MML website. If you do not have the textbook during the first day of instruction, you can sign up for MyMathLab using the 17 day-trial period and enter the access code when you receive the textbook. For reference, a copy of the textbook will be available for use in class, math center, and math lab inside the library. A reliable computer with home internet access is also required.

Course Level Student Learning Outcomes

The student learning outcomes for the course are:

- 1. Demonstrate proficiency in the skills and competencies for this level of mathematics.
- 2. Apply concepts and principles to solve applied problems related to the topics covered in this course.
- 3. Utilize precise language and symbols in written and oral forms.
- > All SLOs assessments are embedded in class activities, homework, quizzes, or exams.

Point Distribution and Grades

Grading Categories			Grading Scale		
Class Participation	05%		Α	90% or Higher	
Homework	15%		В	80% - 89.9%	
Portfolio	10%		С	70% - 79.9%	
Pre/Post-Tests	50%		D	60% - 69.9%	
Final Exam	20%		F	Below 60%	

Other grade options: CR - Credit, NC - No Credit, W - Withdrawn, I - Incomplete, and N grade.

If a student signs up for CR/NC option, a grade of C or higher is considered CR and grade of D or F is considered NC. A student will automatically receive a W grade by dropping the course within certain time line indicated in the system schedule. An Incomplete (I) grade is given when a student fails to complete a small portion of the course due to circumstances beyond his/her control.

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, complete the N grade request form (ask instructor for the form) no later than the time of final examination addressing how you meet the criteria for N grade. You must hand me this form in person unless prior arrangements are made. Then I will make a decision on whether you qualify for the N grade.

Homework

All homework assignments are available at MyMathLab.com for each of the four modules. Since all homework assignments are computer based, students must show appropriate step by step work leading to correct solution on paper that will be filed in student portfolio. Students are expected to complete assigned work in timely manner and get help as early as possible. It is recommended that students do part of the homework that they understand outside of the class and utilize the SI help to work on challenging problems.

Portfolio

Your portfolio will be a cumulative collection of all the work you do in this class, which serves as a physical representation of your effort. The first thing to include in your portfolio is a copy of the syllabus and schedule. One major section of your portfolio should include neatly handwritten work of your MML homework. Since MML does not require you to show your work, written work will serve as a great reference when you study for exams. It will also help me monitor your progress throughout the semester and check to make sure you know how to properly show your logic for solving a math problem. Another major portion of your portfolio should include notes taken while studying for each module and written assigned work from guided study workbook. Written work from Skills Test Review Sheet should also be included in this portfolio. Any additional material that you feel demonstrates what you learn in the class may also be included. Please file everything in an orderly manner. You will be required to show me your portfolio once a week so I can check on your progress and provide feedback. Your Portfolio is due at the time you take your Exit Exam and will account for 10% of your overall grades. Portfolio grading will be based on content, quality and organization. For grading information a Portfolio Assessment Sheet is included in this syllabus.

Portfolio Assessment Rubrics: - The Math Portfolio will be graded in the following way:				
Categories Weight		Detail Information on Percent Deduction		
Initial Documents	10%	Make sure to include the following items:-Syllabus (2%), Completed		
		Schedule Sheet (2%), & Valid Time Log Sheet (6%)		
Class Material/ Notes	40%	1% will be deducted for each incomplete section of each module in		
		the workbook		
Written MyMathLab Work	40%	1% will be deducted for not showing work for each online-homework		
		(except credited homework)		
Organization/Neatness	10%	To get full credit for this portion make sure that I can easily ready your		
		work and find the necessary material in your portfolio without struggle		

Tab # - Label	What to include under this category			
Tab 1 – Main	Syllabus, Log Sheet, Schedule, Handouts, PRST Review, & Final Review			
Tab 2 - Module 5	Lecture Material and Written Work for Web Homework from Module 5			
Tab 3 – Module 6	Lecture Material and Written Work for Web Homework from Module 6			
Tab 4 - Module 7	Lecture Material and Written Work for Web Homework from Module 7			
Tab 5 – Module 8	Lecture Material and Written Work for Web Homework from Module 8			
Exams				

There will be four unit tests, one on each module. Upon completing the coursework for a module, the student takes the unit test on assigned date. A student must achieve a minimum of

70% of the possible points for unit exam and 60% on the final in order to pass the class. Note that all tests as well as the Final Exams must be taken in supervised environment without any references unless otherwise stipulated by the Instructor. Students may be required to go to The Testing Center (TTC), located in the library, for assessments. Do not wait till the last minute to take your test since many things can go wrong (i.e. long waiting line at the testing center, software glitch, or power outage). Information on the TTC and hours of operation can be found on http://windward.hawaii.edu/testing_center. Calculators are not permitted on any tests. Note that if a student fail to achieve minimum score on the exam, a re-take may be allowed by instructor with in certain time interval after going over the exam with SI or instructor.

		Basic Rubrics for Grading Multistep and Word Problems for Exit Exam
	~	Shows complete understanding of a problem's mathematical concepts and procedures
Full	~	Performs algorithms correctly using appropriate notation and precise mathematical language
Credit	~	Gives an elaborate and effective explanation of the solution process in an organized way
	~	Shows near understanding of the problem's mathematical concepts and procedures
Partial	~	Using appropriate notation, performs algorithms completely that may contain minor errors.
Credit	~	Identifies most relevant information and shows a general understanding
	~	selects an appropriate strategy for solving the problem
	~	Shows effective explanation and some evidence of a systematic solution process
	~	Shows some understanding of a problem's mathematical concepts and procedures
Very	~	Performs algorithms that may contain major computational errors
Little	~	Identifies some relevant information and shows limited understanding
Credit	~	Shows little evidence of a solution process or use of appropriate mathematical language
	~	Gives some explanation of the solution process but may be vague or difficult to interpret
	~	Shows no understanding of a problem's mathematical concepts and procedures
No	~	Identifies no relevant information, algorithmic pattern, or evidence of a solution process
Credit	~	Fail to explain significant parts of the problem or omit it altogether

Class Participation and Attendance

To earn class participation points, the student must be present in the class for the duration of the entire class period. A student must also be consistently working and progressing on assigned tasks during each class session. A student may be required to attend SI sessions outside of the class time upon request from Instructor. Attendance is mandatory in this class to ensure that students spend sufficient amount of time on tasks and receive on-demand assistance. More than one week (3 MWF classes or 2 TTR classes) of unexcused absence in regular semester or one day of unexcused absence in six week summer classes may result in failing grades in this course. Proof is required for an excused absence. To create a comfortable learning environment in the classroom, all students are expected to come to class on time with positive attitude and respect everyone that is present in the classroom. Students are not allowed to leave the class during the class. As a courtesy to your classmates, please turn off your cell phones and do not distract them from doing their work. If you have trouble understanding a concept or problem, ask for help by raising your hand. If you are absent from the class, it is your responsibility to check on announcements made while you were absent. If you stop attending this class for any reason, it is your responsibility to drop it.

Additional Activities Outside of Class Time

To stay on schedule, students are expected to complete assigned homework outside of class time, either in a computer lab or at home. In addition, students may be asked to take their tests either at the testing center or math center. The SI session is embedded into Monday-Wednesday-Friday class schedule but for Tuesday-Thursdays classes, the SI session will be during designated time outside of class. Students are expected to attend the SI sessions. If the SI hours do not fit your schedule, you may substitute Trio or Math Lab hours with instructor's consent.

Math Help Outside of Class

To get additional help on class assignments, I encourage you to use the Math Center located in Manaopono 113. You do not have to make an appointment to use this resource. In addition to visit my office hours, You can walk in to Math Lab (Located in the Library room 226) during hours of operation posted on the door and ask for help or visit TRiO tutors. There is also free online 24 hours live tutoring available through via myuh.hawaii.edu known as Brainfuse link under tools. You can also access live local tutors online at http://manoa.hawaii.edu/ola/. I also encourage you to form a small study group with students from your class. There are many useful websites such as https://www.khanacademy.org/ devoted to helping students in Math. I would be happy to assist you in locating the sites that will fit your needs.

Disabilities

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 your succeed in this class. Ann Lemke can be reached at (808) 235-7448, lemke@hawaii.edu, or you may stop by Hale 'Akoakoa 213 for more information.

Academic Dishonesty

Plagiarism and use of another's work without proper acknowledgment is not permitted. A student caught cheating, may receive a failing grade for the course. All students are required to follow the Student Conduct Policies described at <u>http://www.wcc.hawaii.edu/Policies/5_3_Student_Conduct.php</u>.

Remarks

Please check your WCC e-mail account frequently for important announcements. Note that this syllabus is subject to change in extenuating circumstances. When communicating via e-mail or leaving voice message for me, please include your name, course and contact information so that I can easily identify you and get back to you in a timely manner. Make up work will only be allowed upon showing proof of excused absence. For additional academic information, refer to WCC website <u>www.windward.hawaii.edu</u> or go to <u>www.hawaii.edu</u> for system wide information.

WCC Course Structure

Below is a diagram that may be helpful in determining which course is right for you:



Course Content – Modules

Мо	Module #5: Introduction to Real Numbers (including basic roots, signed numbers and properties) and							
Alç	Algebraic Expressions (including Geometric formulas)							
a.	Classify numbers and graph them on a number line	g.	Properties of real numbers					
b.	Order relations	h.	Simplifying expressions					
C.	Find the opposite and absolute value of real	i.	Find the perimeter and area of polygons					
	numbers		(rectangle, square, parallelogram, trapezoid and					
d.	Add real numbers		triangles) and composite figures					
e.	Subtract real numbers	j.	Find circumference and area of circles					
f.	Multiply and divide real numbers; order of	k.	Find volume and surface area					
	operations	١.	Square roots and the Pythagorean Theorem					
Мо	dule #6: Linear Equations and Inequalities in One V	Varia	ible					
a.	Addition Property of Equality and applications	d.	Applications of Linear Equations					
b.	Multiplication Property of Equality and applications	e.	Formulas and Additional Applications from					
C.	More on Solving Linear Equations		Geometry					
		f.	Solving Linear Inequalities					
Мо	odule #7: Linear Equations and Inequalities in two V	aria	bles					
a.	Interpret graphs	e.	Slope of a line					
b.	Solutions of Linear Equations; intercepts	f.	Equations of lines					
C.	Plot ordered pairs	g.	Graph linear inequalities in two variables					
d.	Graph linear equations in two variables; intercepts							
Мо	odule #8: Selected Topics - Quadratic Formula, Para	abola	a, Systems of Equations and Inequalities,					
Sc	Scientific Notation, and Variation							
a.	Scientific notation and applications	f.	Solving system of linear inequalities					
b.	Solving system of equations by graphing	g.	Solving quadratic equations by the Quadratic					
C.	Solve system of equations by substitution		Formula					
d.	Solve system of equations by elimination	h.	Graphing Quadratics equations – Parabola					
e.	Application of Linear Systems	i.	Variation					

Week	Dates (M-F)	Assignments to Complete
1	1/13 – 1/17	Discuss Syllabus and Help sign up for MyMathLab, Start Review Material
2*	1/20 – 1/24	Finish Review Material
3	1/27 – 1/31	Module 5 – Lecture, Discussion, and Homework
4^	2/3 – 2/7	Module 5 – Lecture, Discussion, and Homework
5	2/10 – 2/14	Module 5 – Review, Exam Mod 8, and Go over the Exam
6*	2/17 – 2/21	Module 6 – Lecture, Discussion, and Homework
7	2/24 – 2/28	Module 6 – Lecture, Discussion, and Homework
8*	3/3 -3/7	Module 6 – Review, Exam Mod 8, and Go over the Exam
9	3/10 – 3/14	Module 7 – Lecture, Discussion, and Homework
10	3/17 – 3/21	Module 7 – Lecture, Discussion, and Homework
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110	3/24 – 3/28	Spring Break
10	2/24 4/4	Medule 7 Deview Evens and Co even the Even
12	3/31 - 4/4	Module 7 – Review, Exam, and Go over the Exam
12	A/7 A/11	Module 9 Lecture Discussion and Homowork
13	4/7 - 4/11	
1/*	1/11 1/18	Module 8 Lecture Discussion and Homework
14	4/14 - 4/10	
15	1/21 - 1/25	Module 8 – Review Exam Mod 8, and Go over the Exam
15	4/21 - 4/23	
16	4/28 - 5/2	Final Exam Review
	1120 012	
17	5/5 - 5/9	Consultations Grade Update and Portfolio Check
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18**	5/12 – 5/15	Final's Week – All Course Work Must be done prior to taking Exit Exam

Guided Schedule to Complete Math 28 (Lecture Based) during Spring 2014 Semester

**Final schedule for MWF 8:30am class is Monday, May 12 from 10:00am – 12:00am in this classroom.

^Drop Dates: February 3rd, 2014 – Last day to withdraw with a W grade

*Holidays: January 20th, 2014 - Dr. Martin Luther King Jr. Day February 17th, 2014 – President's Day March 7th, 2014 – Excellence in Education Day April 18th, 2014 – Good Friday

MyMathLab

MyMathLab is an interactive website where you can:

- Self-test & work through practice exercises with step-by-step help to improve your math skills.
- Study more efficiently with a personalized study plan and exercises that match your book.
- Get help when YOU need it. MyMathLab includes multimedia learning aids, videos, animations, and live tutorial.

Before You Begin:

To register for MyMathLab, you need:

A MyMathLab student access code (packaged with your new text, standalone at your bookstore, or

available for purchase with a major credit card at www.MyMathLab.com)

- ☑ Your instructors' Course ID: _____
- ☑ A valid email address

Student Registration:

- Enter <u>www.MyMathLab.com</u> in your web browser.
- Under Register, click Student.
- Enter your **Course ID** exactly as provided by your instructor and click **Continue**. Your course information appears on the next page. If it does not look correct, contact your instructor to verify the Course ID.
- Sign in or follow the instructions to create an account. Use an email address that you check and, if possible, use that same email address for your username. Read and accept the License Agreement and Privacy Policy.
- Click Access Code. Enter your Access Code in the boxes and click
- **Next**. If you do not have an access code and want to pay by credit card or PayPal, select the access level you want and follow the instructions.

Once your registration is complete, a **Confirmation** page appears. You will also receive this information by email. Make sure you print the Confirmation page as your receipt. Remember to **write down your username and password**. You are now ready to access your resources!

Signing In:

- Go to <u>www.pearsonmylab.com</u> or <u>www.coursecompass.com</u> and click Sign in.
- Enter your username and password and click Sign In.
- On the left, click the name of your course.

The first time you enter your course from your own computer and anytime you use a new computer, click the **Installation Wizard** or **Browser Check** on the Announcements page. After completing the installation process and closing the wizard, you will be on your course home page and ready to explore your MyMathLab resources!

Contact Product Support at http://www.mymathlab.com/student-support for live CHAT, email, or phone support.

- · For video tutorial use this link: http://tours.pearsoncmg.com/smscc/index.html
- For technical problems call Tech Support at 800-677-6337, Monday Friday 9am 6pm EST.
- You can also talk to live tutor via toll free 888-777-0463, Sunday to Thursday 5pm 12am EST.

Time Management – Set Your Weekly Schedule

To complete this course within a semester, students are expected to complete each module in about three weeks. To achieve this goal, you will need to devote at least 10 hours per week outside of the class on math work. To manage you time well, complete the following schedule with your class time, tutoring time, SI session, work time, math study time, commute time, and leisure time. Once complete, discuss your schedule with instructor and make appropriate adjustments.

Time/Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
7:00 AM							
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