# Course Syllabus (Spring 2016 Semester)

# Math 26 — Elementary Algebra (5 Credits)

INSTRUCTOR: Navtej (Johnny) Singh

E-MAIL: navtej@hawaii.edu < Reference Your Name and Class Information When E-mailing>

OFFICE: Manaopono 110

OFFICE HOURS: M F\*\* 10am – 11:30am; W 11:30am – 12:30pm, and by appointment.

TELEPHONE: (808) 236 – 9278 < Use this during office hours for instant communication >

CRN	Course ID for MML	Class Meeting	Days	Classroom
61400	singh35557	8:15am – 9:45am	MŴF	Manaopono 102

### 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**

MATH 26 is equivalent to combination of MATH 24 and MATH 25. Topics include quick review of operations with real numbers, linear equations and inequalities in one and two variables; systems of linear equations and inequalities; graphing linear and quadratic equations; properties of exponents; operations on polynomials; factoring; rational expressions and equations; radicals and equations; quadratic equations; and applications. Prerequisite for this class is grade of "B" or better in MATH 21 or MATH 21B or equivalent; satisfactory placement test score or consent of instructor. The course is geared toward fast and disciplined learners.

# 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. Everyday access to a reliable computer with internet access is required.

# **Student Learning Outcomes**

- Utilize precise mathematical language and symbols in written and/or oral form.
- Use algebraic techniques to analyze and solve problems.
- Illustrate the connection between algebraic and geometric representations.

#### **Course Competencies**

- Demonstrate proficiency in performing operations with variable expressions.
- Interpret equations and inequalities geometrically.
- Find solutions to equations and inequalities algebraically.
- Solve system of linear equations and inequalities.
- Interpret quadratic equations geometrically and identify key characteristics.
- Employ algebraic techniques to find the solution for linear, quadratic, rational, and radical equations.
- Evaluate and simplify radical expressions.
- Use algebraic techniques to analyze and solve applied problems.
- Demonstrate proficiency in the use of the rules of exponents and its applications to scientific notation.
- Perform operations on polynomial, rational, and radical expressions
- Employ algebraic techniques to factor a polynomial.
- Graph a linear equation in two variables, find slope and apply it to finding the equation of a line.
- All SLO assessments are embedded in class activities, homework, quizzes, or exams.

#### **Point Distribution and Grades**

Grading Categories	
Class Participation	040
Homework (46)	460
Portfolio	100
Exams (seven)	700
Final Exam	300
Total Points	1600

# Grading Scale

	- <u>-</u>
Α	90% or Higher
В	80% - 89.9%
С	70% - 79.9%
D	60% - 69.9%
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. Note that final grades will be rounded to the nearest tenth of a percent.

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. 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 to turn in on exam day. Students are expected to complete assigned work in timely manner and get help as early as possible.

### Exams

There will be seven unit tests in this class and one comprehensive final. Upon completing the chapter material, the student takes the unit test on assigned date. A student must achieve a minimum of 70% of the possible points for unit exams 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. If taking an exam at the testing center, do not wait till the last minute since many things can go wrong (i.e. long waiting line at the testing center, software glitch, or power outage). The information on the TTC and hours of operation can be found on <a href="http://windward.hawaii.edu/testing\_center">http://windward.hawaii.edu/testing\_center</a>. Calculators are not permitted on any tests. Note that if a student fails to achieve minimum score on the exam, a re-take may be allowed by instructor with in certain time interval after certain review criteria.

Basic Rubrics for Grading Multistep and Word Problems for Exams				
	~	Shows complete understanding of a problem's mathematical concepts and procedures		
Full Credit	~	Performs algorithms correctly using appropriate notation and precise mathematical		
		language		
	~	Gives an elaborate and effective explanation of the solution process in an organized way		

Partial Credit (≥ ½ CR)	<ul> <li>Shows near understanding of the problem's mathematical concepts and procedures</li> <li>Using appropriate notation, performs algorithms completely that may contain minor errors.</li> <li>Identifies most relevant information and shows a general understanding</li> <li>selects an appropriate strategy for solving the problem</li> <li>Shows effective explanation and some evidence of a systematic solution process</li> </ul>
Very Little Credit (< ½ CR)	<ul> <li>Shows some understanding of a problem's mathematical concepts and procedures</li> <li>Performs algorithms that may contain major computational errors</li> <li>Identifies some relevant information and shows limited understanding</li> <li>Shows little evidence of a solution process or use of appropriate mathematical language</li> <li>Gives some explanation of the solution process but may be vague or difficult to interpret</li> </ul>
No Credit	<ul> <li>Shows no understanding of a problem's mathematical concepts and procedures</li> <li>Identifies no relevant information, algorithmic pattern, or evidence of a solution process</li> <li>Fail to explain significant parts of the problem or omit it altogether</li> </ul>

### **Class Participation and Attendance**

To earn class participation/attendance points, student must be present in the class for the duration of the entire class period. A student will lose two points for each absent and one point for each tardy. A student may be required to attend SI sessions outside of the class time upon request from Instructor. 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 session without the Instructor's approval because it is considered a sign of disrespect to everyone attending 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.

### 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. 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. Another portion of your portfolio should include handwritten work for the review sheets for each exam and the final exam. Any additional material that you worked on during class or SI session should also be included in the portfolio. Please file everything in an orderly manner. Throughout the semester, you will be asked to show me your portfolio so that I can check your progress and provide feedback. Your Portfolio is due in class during last day of instruction. Portfolio grading will be based on content, quality and organization.

### 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.

#### Math Help Outside of Class

To get additional help on class assignments, I encourage you to come by my office hours or use the Math Lab (located in the library) or visit TRiO. You do not have to make an appointment to visit Math Lab for help. 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 <a href="http://manoa.hawaii.edu/ola/">http://manoa.hawaii.edu/ola/</a>. I also encourage you to form a small study group with students from your class. There are many useful websites such as <a href="https://www.khanacademy.org/">https://www.khanacademy.org/</a> 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 within reasonable time frame. For additional academic information, refer to WCC website www.windward.hawaii.edu or go to www.hawaii.edu for system wide information.

1       1/11 – 1/15       Discuss Syllabus, Sign up for MML, Review, & Start Chapter 2         2*       1/18 – 1/22       Continue Chapter 2         3       1/25 – 1/29       Review, CH 2 Exam, Star Chapter 3         4^       2/1 – 2/5       Complete Chapter 3, Review	Veek Dates (M-F) Lessons/Topics/Assignments	Week
1       1/11 – 1/15       Discuss Syllabus, Sign up for MML, Review, & Start Chapter 2         2*       1/18 – 1/22       Continue Chapter 2         3       1/25 – 1/29       Review, CH 2 Exam, Star Chapter 3         4^       2/1 – 2/5       Complete Chapter 3, Review		
2*       1/18 – 1/22       Continue Chapter 2         3       1/25 – 1/29       Review, CH 2 Exam, Star Chapter 3         4^       2/1 – 2/5       Complete Chapter 3, Review	 1 1/11 – 1/15 Discuss Syllabus, Sign up for MML, Review, & Start Ch	1
2         Area         Contactor of taptor 1           3         1/25 – 1/29         Review, CH 2 Exam, Star Chapter 3           4^         2/1 – 2/5         Complete Chapter 3, Review	 2* 1/18 – 1/22 Continue Chapter 2	2*
3         1/25 – 1/29         Review, CH 2 Exam, Star Chapter 3           4^         2/1 – 2/5         Complete Chapter 3, Review		_
4^     2/1 – 2/5     Complete Chapter 3, Review	3 1/25 – 1/29 Review, CH 2 Exam, Star Chapter 3	3
4 <sup>^</sup> 2/1 – 2/5 Complete Chapter 3, Review		
	 4 <sup>^</sup> 2/1 – 2/5 Complete Chapter 3, Review	4^
5 2/8 – 2/11 CH 3 Exam & Start Chapter 4	 5 2/8 – 2/11 CH 3 Exam & Start Chapter 4	5
		5
6* 2/15 – 2/19 Complete Chapter 4, Review, CH 4 Exam	 6* 2/15 – 2/19 Complete Chapter 4, Review, CH 4 Exam	6*
7 2/22 – 2/26 Cover Chapter 5	 7 2/22 – 2/26 Cover Chapter 5	7
8* 2/20 3/4 Einich Chapter 5 Poview, CH 5 Exam	 9* 2/20 3/4 Einich Chapter 5 Poview CH 5 Exam	0*
6 2/29 – 3/4 Finish Chapter 5, Review, CH 5 Exam		0
9 3/7 – 3/11 Cover Chapter 6	 9 3/7 – 3/11 Cover Chapter 6	9
10 3/14 – 3/18 Finish Chapter 6, Review, CH 6 Exam	 10         3/14 – 3/18         Finish Chapter 6, Review, CH 6 Exam	10
	 14* 2/24 2/25 Carrier Dreek	44*
11° 3/21 – 3/25 Spring Break	 11 <sup>a</sup> 3/21 – 3/25 Spring Break	11"
12 3/28 – 4/1 Cover Chapter 7	 12 3/28 – 4/1 Cover Chapter 7	12
13   4/4 – 4/8   Finish Chapter 7, Review, CH 7 Exam	134/4 – 4/8Finish Chapter 7, Review, CH 7 Exam	13
14 4/11 – 4/15 Cover Chapter 8	 14 4/11 – 4/15 Cover Chapter 8	14
15 4/18 – 4/22 Complete Chapter 8, Review, CH 8 Exam	 15 4/18 – 4/22 Complete Chapter 8, Review, CH 8 Exam	15
16         4/25 – 4/29         Cover Chapter 9	16         4/25 – 4/29         Cover Chapter 9	16
17** 5/2 – 5/6 Final Exam Review, & Discuss Current Grades	 17**         5/2 – 5/6         Final Exam Review, & Discuss Current Grades	17**
18** 5/9 – 5/13 Final Exam Week	 18** 5/9 – 5/13 Final Exam Week	18**

# Math 26 Tentative Schedule for Spring 2016

\*\*Final for this class is scheduled on Wednesday, December 16<sup>th</sup> from 8:30am to 10:30am in classroom.

^Drop Dates: February 1, 2016 – Last day to withdraw without a W grade

\*Holidays:

January 18, 2016 – Martin Luther King Jr. Day February 16, 2016 – Presidents Day March 4, 2016 - Excellence in Education Day

# 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
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7:30 AM							
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