

Math 100 Survey of Mathematics 3 Credits (CRN 63394 & 63495) MW 8:30 AM – 9:45 AM

#### Math 78 College Math Companion

1 Credit (CRN 63393) Friday 8:30 AM – 9:45 AM

**INSTRUCTOR:** Kevin A. Takayama, Instructor

**OFFICE:** Hale Mana 'opono 105 **OFFICE HOURS**: M 8:00 AM – 8:30 AM;

TTh 8:30 AM – 9:15 AM & 11:00 AM – 11:30 AM;

W 9:45 AM - 10:45 AM;

or by appointment

**TELEPHONE:** (808)236-9283 **EMAIL:** ktakayam@hawaii.edu

**EFFECTIVE DATE:** Fall 2022

#### 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 the Ko'olau region of O'ahu and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

# **CATALOG DESCRIPTION**

# Math 78: College Math Companion (1 credit)

This course provides students concurrently enrolled in MATH 100, MATH 101, MATH 111, or MATH 115 with Just-In-Time support with special emphasis on pattern recognition and problem solving. Course topics are tailored to the concurrent course and may include ratio and percent, unit conversion, graphs, data interpretation, basic algebra, solving linear equations, and working with formulas. (One Lecture Hour)

Pre-Requisite(s): Satisfactory Placement Score

# Math 100: Survey of Mathematics (3 credits)

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 problem solving and analysis. (3 hours lecture)

Pre-Requisite(s): C or better in MATH 25, 26, 28, 29, 75X or higher or equivalent, co-requisite enrollment in Math 78, satisfactory math placement test score, or consent of instructor.

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

MyLab Math is an online learning resource. Every week you will be assigned online assignments through MyLab Math. Most exercises include learning aids, such as guided solutions, sample problems, and extra help as you're working through them, and they offer helpful feedback when you enter incorrect answers. A variety of multimedia resources are also available in the homework exercises. You can link to the ebook, video clips, and animations to improve your

understanding of key concepts. Videos are captioned in English, and several courses are also captioned in Spanish.

This course will be participating in the Bookstore's Interactive Digital Access Program (IDAP). Through this program, you will access your course material digitally, and it will be available to you by the first day of class.

A charge for the digital course material through IDAP will be added to your MyUH account. You have the option to opt-out of receiving your course material through IDAP. By opting-out, you will lose access to the course material and the charge will be refunded on your MyUH account. If you do not opt-out, the charge will stay on your MyUH account. Any unpaid charges on your MyUH account will turn into a hold. Holds on your account will prevent you from accessing various services within the University.

You may opt-out by visiting your unique Inclusive Access Student Portal, which can be found in your IDAP welcome email (Subject Line: "IMPORTANT: You have enrolled in an IDAP Course").

For more information regarding IDAP, please contact your campus bookstore.

#### **GETTING STARTED WITH THIS ONLINE COURSE**

- 1. Enter your Laulima course and locate the Vitalsource app. The name and location of the app may vary based on the set up of the course. Select **Vitalsource for UH Windward CC IDAP**.
- 2. Under My Courses Home, your Pearson materials tied to this course will appear.
  - If you are currently *Opted In* for course material access, the "I am opted-in to this resource" checkbox is selected. To access your course materials, select the **Launch Courseware** button.
- 3. Select the **Open MyLab & Mastering** button to launch your Pearson course.
- 4. If prompted, select **I** Accept to agree to Pearson's End User License Agreement.
- 5. Link your Laulima user account to either an existing Pearson account by entering your Pearson Username and Password or to a new user Pearson account by selecting the Create button.
- 6. After linking your accounts, select **Go to My Courses**.
- 7. More detailed instructions can be found in the Resources of Laulima

#### STUDENT LEARNING OUTCOMES

As a result of taking this course, students can expect to attain the following outcomes:

- 1. Utilize basic properties and/or operations related to the topics covered in the course
- 2. Employ symbolic/mathematical techniques to solve applied problems
- 3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

#### **FOUNDATION Quantitative Reasoning HALLMARKS**

Math 100 fulfills 3 credits of the General Education requirements (Foundations: Quantitative Reasoning) for both an A.A. degree at WCC and a Bachelor's degree at UH Manoa. To satisfy the Quantitative Reasoning requirement, a course will

1. provide students with theoretical justifications for, and limitations of, mathematical or statistical

- methods, and the formulas, tools, or approaches used in the course.
- 2. include application of abstract or theoretical ideas and information to the solution of practical quantitative reasoning problems arising in pure and applied research in specific disciplines, professional settings, and/or daily and civic life.
- 3. provide opportunities for practice and feedback that are designed to help students evaluate and improve quantitative reasoning skills by including a course component at least once per week with a maximum 30:1 student-to-teacher ratio.
- 4. be designed so that students will be able to
  - a. identify and convert relevant quantitative information into various forms such as equations, graphs, diagrams, tables, and/or words;
  - b. select appropriate techniques or formulas, and articulate and evaluate assumptions of the selected approaches;
  - c. apply mathematical tools and perform calculations (including correct manipulation of formulas);
  - d. make judgments, create logical arguments, and/or draw appropriate conclusions based on the quantitative analysis of data, the assumptions made, the limitations of the analysis, and/or the reasonableness of results; and
  - e. effectively communicate those results in a variety of appropriate formats.

#### **COURSE TASKS**

The mode of instruction is primarily discussion-problem solving where the initial portion of each class period may be utilized to discuss and clarify any questions from the preceding class meeting and/or assignment, and the remaining portion is used to discuss new material. Lectures, directed student explorations, group work, appropriate technologies, and projects will also be used as appropriate. After the completion of each unit, a review and an exam will be conducted.

# **ASSESSMENT TASKS AND GRADING**

The student will <u>demonstrate competency</u> in the objectives by completing and turning in all assignments as requested, by taking unit exams, and by taking a final exam over concepts and skill covered in the entire course.

Unless permission is granted by the instructor, assignments and exams must be completed and submitted to the instructor at the specified date and time.

Points will be assigned to each graded assignment, class activity, and tests as follows: **MyLab Math**. Homework sets will be graded on a 0 - 10-point scale. Assignments are to be completed by the assigned due date.

**Discussions.** Every week there will be a discussion through Laulima. Each discussion will be graded on a 0 - 10-point scale. You will need to reply to the main discussion topic.

**Quizzes.** Weekly quizzes will be graded on a 0 - 5-point scale and will take place at the last meeting of every week. There is no make-up for a missed weekly quiz. Students must be present in class to participate.

**Unit Exams.** There are four unit exams. A unit exam will be approximately 100 minutes in length and will be scored on a 100-point scale. Each exam must be completed by the assigned due date. <u>Exams are taken through MyLab Math outside of class.</u>

Showing and Submitting Work for Exams. On paper, in a notebook, or digitally, please show all your work in an organized, orderly fashion and number each question. After you submit an exam through MyLab Math, you must immediately upload your work as a single pdf to Laulima's Drop Box. You're welcome to use a scanner. There are also many apps that can create pdfs using your phone. This needs to be done within 10 minutes of submitting your test online. Doing so allows me to give you partial credit for problems you did incorrectly. Your work is also what earns you credit. If you don't show meaningful work, points will be deducted even if you get the answer correct.

**Exam Reviews**. Prior to each unit exam, students will be assigned an exam review as preparation. This exam review must be at least 90% completed prior to taking the exam.

**Make-up.** Make-up opportunity for exams will be possible only upon a timely presentation of a serious and justified explanation of the student's inability to take the exam on the designated date. The instructor has the right to request documentation of the student's inability to take the exam on the designated date is justified. **No more than one test or exam may be taken by a student on a make-up basis.** 

**Final Exam**. The final exam will cover the concepts and skills in the entire course. The final exam is double the length in time of a unit exam and will be scored on a 200-point scale. There is no retest or make-up.

**Course grade**. A letter grade for the course will be assigned according to the level of achievement as provided in the table below:

GRADE	DEFINITION
A	90% - 100% of the total possible points
В	80% - <90% of the total possible points
C	70% - <80% of the total possible points
Cr	70% - 100% of the total possible points
NC	<70% of the total possible points
D	60% - <70% of the total possible points
F	< 60% of the total possible points

#### Percentage Breakdown

MyLab Math		30%
Discussions		10%
Quizzes		10%
Unit Exams		30%
Final Exam		20%
	Total:	100%

Note: Students must apply for the Cr/NC grading option at the Admissions Office. Consult the WCC Catalog for deadlines.

Note: W grade is given only when the student officially withdraws from the course at the Admissions Office. Consult the WCC Catalog for deadlines.

#### **COURSE CONTENT**

# Concepts or Topics

- Algebra: Graphs and Functions
- Personal Finance
- Logic
- Counting Methods
- Probability
- Statistics

# Skills or Competencies/Responsibilities of Students. Success in this course will be enhanced by:

- *1.* a positive, inquiring attitude towards mathematics:
- 2. setting aside adequate time for studying and working of problems;
- **3.** reading the text carefully and making use of other learning materials whenever necessary;
- **4.** seeking assistance from the instructor and the Math Lab personnel whenever necessary;
- 5. completing assignments by the designated date;
- **6.** regular class attendance, participation and maintaining accurate class notes.

#### LEARNING RESOURCES

**Required Text**: Thinking Mathematically, 7th edition, by Pearson.

**Required Material**: Scientific calculator. Graphing calculators are not permitted.

TRiO: Hale Kāko'o 116

The Math Lab: La'akea 220 <a href="https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/">https://windward.hawaii.edu/services-for-students/tutoring/ka-piko/</a>

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

Tutor.com: 24/7 online tutoring that connects students one-to-one with a subject expert tutor

#### ADDITIONAL INFORMATION

- 1. **Grading on Homework, Quizzes, or Exams.** To receive full marks for problems done on any graded activity, you must show your work neatly and completely as well as provide clear written explanations when it is asked for. Partial credit may be awarded.
- 2. **Homework.** For each chapter, as you read through each section and watch each lecture video, it is recommended that you write down the words, phrase or math symbols and their meanings, formulas, and properties/rules that are important for each section. It is important for you to know these.
- 3. **Laulima.** The syllabus, course calendar, homework schedule, grades, etc. are all viewable through Laulima. Check Laulima regularly to stay up to date.
- 4. **Communication.** It is your responsibility to stay in communication with the instructor. If you will be unable to complete the assignments for any reason, please inform your instructor so it may be determined if an extension is acceptable. The instructor may need to contact you

throughout the semester and will do so via email. It is your responsibility to check your student email on a regular basis.

#### **DISABILITIES ACCOMMODATIONS**

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 Accessibility Counselor to discuss reasonable accommodations that will help you succeed in this class. Jodi Asato can be reached at (808) 235-7472, jodiaka@hawaii.edu, or you may stop by Hale Kākoʻo 105 for more information.

#### STUDENT BASIC NEEDS

Basic needs include food and housing, childcare, mental health, financial resources and transportation, among others. Student basic needs security is critical for ensuring strong academic performance, persistence and graduation and overall student well-being. If you or someone you know are experiencing basic needs insecurity, please see the following resources: UH System Basic Needs.

# SEX DISCRIMINATION AND GENDER-BASED VIOLENCE RESOURCES (TITLE IX)

Windward Community College is committed to providing a learning, working, and living environment that promotes personal integrity, civility, and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking.

If you or someone you know is experiencing any of these, WCC has staff and resources to support and assist you. To report an incident of sex discrimination or gender-based violence, as well as receive information and support, please contact one of the following:

Jojo Miller, Confidential Campus Advocate

Phone: (808) 348-0663

Email: jojo.miller@hawaii.edu

Leslie Cabingabang, Senior Confidential Resource

Phone: (808) 235-0432 Email: dkahale3@hawaii.edu

Desrae Kahale, Title IX Coordinator

Phone: (808) 235-7393 Email: dkahale3@hawaii.edu

As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator. Although the Title IX Coordinator and I cannot guarantee confidentiality, you will still have options about how your case will be handled. My goal is to make sure you are aware of the range of options available to you and have access to the resources and support you need.

For more information regarding sex discrimination and gender-based violence, the University's Title IX resources and the University's Policy, Interim EP 1.204, go to <a href="mailto:manoa.hawaii.edu/titleix/">manoa.hawaii.edu/titleix/</a>

# **ACADEMIC INTEGRITY**

Work submitted by a student must be the student's own work.

In this class, students who commit academic dishonesty, cheating or plagiarism will have the following consequence(s):

Students will receive a failing grade for plagiarized assignments.

All cases of academic dishonesty are referred to the Vice Chancellor for Student Affairs.

# **ALTERNATE CONTACT INFORMATION**

If you are unable to contact the instructor, have questions that your instructor cannot answer, or for any other issues, please contact the Academic Affairs Office:

Location: Alaka'i 121Phone: (808) 235-7422

# **Tentative Calendar**

	Monday	Tues	Wednesday	Thurs	Friday
Aug	22 Introduction	23	7.1	25	26 Math 78
Sept	7.2	30	7.6	1	2 Math 78
	5 Labor Day	6	7 7.6 cont	8	9 Math 78
	8.5, 8.6	13	14 8.7, 8.8	15	16 Math 78
	19 Exam 1 Review	20	21 <b>Exam 1</b>	22	23 Math 78
	3.1, 3.2	27	28 3.3, 3.4	29	30 Math 78
Oct	3.5, 3.6	4	5 3.7	6	7 Math 78
	3.8	11	12 Exam II Review	13	14 Math 78

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	17	18	19	20	21 Math 78
	Exam II		11.1, 11.2		Tradit 70
	24	25	26	27	28
	11.3, 11.4		11.5		Math 78
Nov	31	1	2	3	4
	11.6		11.7		Math 78
	7	8	9	10	11
	11.8		Exam III Review		Veteran's Day/Exam III
	14	15	16	17	18
	12.1		12.2		Math 78
	21	22	23	24	25
	12.3		12.4		No Class
Dec	28	29	30	1	2
	12.5		Mini Exam IV Review		Math 78/Exam IV
	5	6	7	8	9
	Review for Final Exam		Final Exam		
	12	13	14	15	16