



UNIVERSITY of HAWAII®
WINDWARD
COMMUNITY COLLEGE

Math 112 Mathematics for Elementary Teachers II

3 Credits (CRN 61340)

Asynchronous

INSTRUCTOR: Kevin A. Takayama, Instructor
OFFICE: Hale Mana‘opono 105
OFFICE HOURS: Wednesday 11:15 AM – 12:15 PM; or by appointment
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EFFECTIVE DATE: Spring 2021

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 112 is the second of a two-course sequence designed to give prospective elementary education majors the depth of understanding necessary to teach mathematics in the elementary classroom. Topics include the representation of and operations on the natural numbers and properties of those operations. Emphasis will be on communication, connections and problem solving, representations and reasoning.

Pre-Requisite(s): Grade of “C” or better in MATH 111.

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.

STUDENT LEARNING OUTCOMES

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

1. Use mathematical concepts to demonstrate critical thinking
2. Employ appropriate techniques to solve problems related to elementary math education
3. Utilize precise mathematical language and symbols to effectively communicate mathematics in written and/or oral form

FOUNDATION HALLMARKS

Math 112 fulfills 3 credits of the General Education requirements (Foundations: Symbolic) for both an A.A. degree at WCC and a Bachelor’s degree at UH Manoa. 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.

COURSE TASKS

This is an asynchronous course. Students independently watch lecture videos in order to complete homework sets. Discussion forums are a large part of this course. Students post within the discussion forums and are expected to reply to their classmates’ posts.

ASSESSMENT TASKS AND GRADING

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

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

Points will be assigned to each graded assignment as follows:

MyLab Math. Homework sets will be graded on a 0 - 10 point scale. Weekly assignments are to be completed by the following Sunday.

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 and comment on a classmate’s post.

Weekly Quizzes. Weekly quizzes will be graded on a 0 - 10 point scale and will be due on the Sunday of the following week through MyLab Math. The weekly quizzes will be timed and will consist of a few questions from the week’s lessons.

Unit Tests. A unit test will be approximately 100 minutes in length and will be scored on a 100-point scale. The last day to complete a unit test is the Friday of the test week. There are no retests.

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

Make-up. Make-up opportunity for a unit test will be possible only upon a timely presentation of a serious and justified explanation of the student’s inability to complete the test on time. The instructor has the right to request documentation of the student’s reasoning for not completing the test on time and to determine if the reasoning is justified. A make-up test must be taken within one week of the test unless otherwise specified by the instructor. **No more than one test may be taken by a student on a make-up basis.**

Course grade. Each 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
B	80% - 89% of the total possible points
C	70% - 79% of the total possible points
Cr	70% - 100% of the total possible points
NC	Less than 70% of the total possible points
D	60% - 69% of the total possible points
F	Less than 60% of the total possible points

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.

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

- Pairing
- Number of Elements in a Set
- Equivalent Sets
- Less Than or Greater Than
- Infinite Sets
- Addition
- Subtraction
- Prime Numbers
- Transformations

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

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

LEARNING RESOURCES

Required Text: *A Problem Solving Approach to Mathematics for Elementary School Teachers* by Billstein, Libeskind and Lott, Pearson, 12th edition.

TRiO: Hale Kāko‘o 116

The Math Lab: La‘akea 220 <https://sites.google.com/view/kapikowcc/math-lab?authuser=0>

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, Weekly Quizzes, or Tests.** 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.

5. **MySuccess.** At Windward community college we want every student to be successful. MySuccess is a system wide effort that seeks to support students early in the semester when they first begin experiencing difficulty in class. If I feel that you're having difficulty in my class within the first few weeks of the semester (e.g. missing class, missing assignments, or low test scores) and working together to address your challenges shows that you would really benefit

from being connected to resources outside of the classroom, I may refer you to your assigned counselor. Once referred, MySuccess will:

- Call you and send an email to your Hawaii.edu account to let you know about my referral; and
- have the MySuccess team follow up with you by phone or email to find out what kinds of help you might need and connect you with the necessary resources to help you devise a strategy for success.

I will not refer you without telling you. However, if I do refer you, know that I am doing so in an effort to connect you with all of the help you may need to do well this semester as your success is important to me.

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. Roy Inouye can be reached at (808) 235-7448, royinouy@hawaii.edu, or you may stop by Hale Kāko‘o 106 for more information.

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:

Kaahu Alo, Student Life Counselor & Designated Confidential* Advocate for Students
 Phone: (808) 235-7354
 Email: kaahualo@hawaii.edu
 Office: Hale ‘Ākoakoa 232
**confidentiality is limited*

Desrae Kahale, Mental Health Counselor & Confidential Resource
 Phone: (808) 235-7393
 Email: dkahale3@hawaii.edu
 Office: Hale Kāko‘o 101

Karla K. Silva-Park, Title IX Coordinator
 Phone: (808) 235-7468
 Email: karlas@hawaii.edu
 Office: Hale ‘Ākoakoa 220

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 manoa.hawaii.edu/titleix/

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 121
- Phone: (808) 235-7422

Math 112 Schedule Spring 2021

Week	Dates (M-F)	Assignments to Complete
1	1/11 – 1/15	Read syllabus, discussion post, connect to MyLab Math MyLab Math: MyLab Math Tutorial
2*	1/18 – 1/22	Schedule 15 min meeting with instructor, Discussion post MyLab Math: 2-2, Quiz #1
3	1/25 – 1/29	Discussion post MyLab Math: 2-3, Quiz #2
4	2/1 – 2/5	Review Unit 1 Unit 1 Test
5	2/8 – 2/12	Discussion post MyLab Math: 4-2, Quiz #3
6*	2/15 – 2/19	Discussion post MyLab Math: 4-3, Quiz #4
7	2/22 – 2/26	Review Unit 2 Unit 2 Test
8	3/1 – 3/5	Discussion post MyLab Math: 6-2, Quiz #5
9	3/8 – 3/12	Discussion post MyLab Math: 6-3, Quiz #6
	3/15 – 3/19	Spring Break
10*	3/22 – 3/26	Review Unit 3 Unit 3 Test
11*	3/29 – 4/2	Discussion post MyLab Math: 8-1 Quiz #7
12	4/5 – 4/9	Discussion post MyLab Math: 8-2, Quiz #8
13	4/12 – 4/16	Discussion post MyLab Math: 13-2, 13-3, Quiz #9
14	4/19 – 4/23	Discussion post MyLab Math: 14-1, Quiz #10
15	4/26 – 4/30	Unit 4 Review Unit 4 Exam
16	5/3 – 5/5	Consultations, Final Exam Review
17**	5/10 – 5/13	Final Exam Week

**The Final Exam must be completed by Thursday, May 13th

*Holidays: January 18th – Dr. Martin Luther King Jr Day
 February 15th – Presidents’ Day
 March 15th-19th – Spring Break
 March 26th – Prince Kūhiō Day
 April 2nd – Good Friday