Alaska Pacific University

Course: MT 10100 S01– Intermediate Algebra (Tumyaraa)

Semester: Summer, Fall & Spring, Session 2025

Credit Hours: 4

Class Meeting Time/Place: RFS 8:30am – 12:20pm / 1:00pm – 5:00pm (Summer).
T 4:00pm – 5:00pm (Fall & Spring)

Course Fee: None

Instructor: Steve Duby,
sduby@alaskapacific.edu

Office Hours: via Zoom and via email (post-summer intensive).

ALASKA PACIFIC UNIVERSITY
TUMYARAA
BRIDGE PROGRAM

Course Description

This course will cover a review of basic algebra, solving linear equations and inequalities, graphs and functions, systems of equations, polynomials, rational expressions (equations and functions), radical expressions (equations and functions), quadratic equations, and functions.

Core Competencies

APU has identified five essential competencies which are developed across degree programs from the Foundational Studies though Major Studies and Senior Project. This class develops the following essential competency: (CT, Critical Thinking).

Learning Objectives

Upon completion of the course, students will be able to:

1. Identify, add, subtract, multiply, and divide different types of real numbers including radicals.

2. Identify and combine common terms in expressions and equations.

3. Solve linear equalities and inequalities with one-unknown and rearrange formulas for a specific unknown.

4. Use integers as exponents in multiplication and division, as well as raising a power to a power.

5. Identify, add, subtract, multiply and divide polynomial expressions.

6. Reduce polynomials by identifying common factors, special products, grouping, and trial and error methods.

7. Graph two-variable linear equations and inequalities.

8. Solve problems involving quadratic equations via Principle of Zero Products as well as the quadratic formula.

9. Solve systems of equations containing two and three unknowns by substitution, elimination, or matrices.

10. Write linear equations from data information and from graphs.

11. Simplify, add, subtract, multiply and divide rational expressions and understand the LCD.

12. Add, subtract, multiply and divide complex numbers.

13. Solve other types of equations such as absolute value, radical, and polynomial.

14. Understand the concept of a function and function algebra.

Active Learning

Active learning refers to the process of deep understanding that comes from interactive and reflective education rather than rote memorization and information recall. For this class, active learning involves attending and actively engaging in class sessions, completing assignments by scheduled due date, seeking help from classmates or the instructor when needed and completing in-class projects.

Instructional/Delivery Methods

Students will participate in a Thinking Classroom, where active problem-solving plays a central role in content delivery. Students will be expected to stand and work at a whiteboard in randomized groups on problems centered on our proprietary cultural math curriculum. Instructional time will rotate between the classroom and outside (on-campus) as students dedicate focus to their course project. Student success hinges

upon their participation, perseverance with problems, and persistence in their project completion.

Required Texts, Readings, Materials

Available online or in printed distribution. Students are encouraged to bring a journal for notes.

Attendance & Participation

Attendance is mandatory for all sessions due to the intensive nature of the course. The course relies heavily on in-person participation, and absences will significantly impact skill development and project completion. Students are allowed one excused absence for emergencies (e.g., illness, religious observances) with prior notification. Additional unexcused absences ill result in:

- 2 absences: Lowering of final grade by one letter grade.
- 3 or more absences: Potential course failure.

Tardiness or leaving early three times will count as one absence. Participation in the class project is equivalent to an exam and is mandatory. Missing a project review will result in a 50% reduction in the project grade. Full engagement in discussions, demonstrations, and hands-on activities is expected to maximize learning.

Communications Expectations

All official communication regarding courses and APU information goes through APU email. Students are expected to be reading APU email routinely.

Technical Requirements & Applications

For technical assistance with APU Learn, MY APU, the Student Portal, contact the IT Helpdesk: 907-564-8350, ithelpdesk@alaskapacific.edu

UAA/APU Consortium Library

Developing the essential competency of Critical Thinking, APU students are challenged to grow their information literacy, analyzing and evaluating sources for truth claims,

methodologies, and perspectives. The Consortium Library contributes significantly to the information literacy of our community with rich collections and references, as well as expert staff and online services.

Website: https://consortiumlibrary.org/ Phone: 907-786-1871

Ask-a-Librarian: https://ask.consortiumlibrary.org/

To activate your library privileges (for both online and onsite access), contact the IT Department.

Americans with Disabilities Act Policy

In accordance with the Americans with Disabilities Act of 1990, it is the policy of Alaska Pacific University to make reasonable accommodations for qualified students with disabilities. If a student with a disability needs reasonable accommodations, the student must notify the Assistant to the Dean of Students in a timely manner. Once the student notifies the Assistant to the Dean of Students, processes and procedures for documenting a disability will be provided to the student upon request.

Once the student provides the required documentation to the Assistant to the Dean of Students, the interactive process for developing reasonable accommodations will begin. This process involves the Assistant to the Dean of Students meeting or talking with the student prior to providing the student with a reasonable accommodation approval or denial letter. Students will be notified, in writing, by the Assistant to the Dean of Students when the request for reasonable accommodations is approved or denied. To receive reasonable accommodations with respect to a University course, a student must follow the process described above for requesting reasonable accommodations. It is the student's responsibility to present the approval letter, documenting the approved reasonable accommodations with respect to the University course, to the faculty member. Faculty members are not expected to make reasonable accommodations for students who have not been officially approved for reasonable accommodations by the Assistant to the Dean of Students. The official approval is in the form of a signed approval letter that documents the approved reasonable accommodations with respect to the University course. The Assistant to the Dean of Students will not discuss reasonable accommodations for any student with a faculty member, without prior written consent from that student. For more information please contact: Kaili Martin, Assistant to the Dean of Students (kamartin@alaskapacific.edu)

Honor Policy

APU is a community of learners in which all enjoy freedoms and privileges based upon mutual trust and respect as well as a clear sense of responsibility. Students are expected to do all work assigned, to do it honestly and with integrity. Cheating on examinations, plagiarism, or submitting the work of others as one's own are specific examples of prohibited conduct. Students who engage in such activities will be subject to disciplinary measures, which may include failure in the course or expulsion from the university.

Grades & Grading Policies

Cultural Math Project	45%
Assignments	30%
Participation	25%

Grade Scale

Grade:	A	B	C	D	F
Min %	90	80	70	60	<60