

**Fond du Lac Tribal and Community College
COURSE OUTLINE FORM**

03/19/19

Please return this form to the college vice president of academic affairs and the chairperson of the Academic Affairs and Standards Council (AASC)

1. Prepared by: _____

2. Date submitted: _____

3. Date approved: 11/9/2022 Date revised _____

4. Department/discipline: Mathematics

5. Department(s) endorsement(s): _____
(Signatures of the person(s) providing the endorsement are required.)

6. Course Title: Contemporary Math Preparation
Abbreviated course title for Transcripts (25 characters or less): Contemporary Math Prep

7. Course Designator: MATH 8. Course Level: 0026

9. Number of Credits: Lecture 2 Lab _____

10. Control Number (on site) 15 Control Number (online) 12

11. Catalog/Course description:

Contemporary Math Preparation is designed to support students who need help with a college-level quantitative reasoning course. This course focuses on the fundamental math skills that are needed to analyze a variety of practical applications. It provides qualified students with the opportunity to improve mathematical skills while acclimating to the challenges of a college-level quantitative reasoning course.

12. Course prerequisite(s) or co-requisite(s): Accuplacer scores/ Other courses

Prerequisite(s):

Co-requisite: MATH 1025 Introduction to Contemporary Mathematics

13. **Course Materials** (Recommended course materials and resources. List all that apply, e.g. textbooks, workbooks, study guides, lab manuals, videos, guest lecturers).

Instructor's choice.

14. **Course Content** (Provide an outline of major topics covered in course)

1. Operations, including rounding and order of operations, for whole numbers and integers.
2. Operations with rational numbers and conversion between decimals, percents and fractions.
3. Evaluation and manipulation of algebraic expressions and equations.
4. Cartesian coordinate system.
5. Solving and graphing linear equations, including the concept of slope, and inequalities.
6. Solving ratios.
7. Percent applications.
8. Measurement units and calculations for 2-D and 3-D figures.
9. Various problem-solving techniques, including non-algebraic.
10. Study skills for success in college math.

15. Learning Goals, Outcomes, and Assessment

At FDLTCC we have 4 Competencies Across the Curriculum (CAC) areas. They are as follows:

- A. Information Literacy (the ability to use print and/or non-print tools effectively for the discovery, acquisition, and evaluation of information.)
- B. Ability to Communicate (the ability to listen, read, comprehend, and/or deliver information in a variety of formats.)
- C. Problem Solving (the ability to conceptualize, apply, analyze, synthesize, and/or evaluate information to formulate and solve problems.)
- D. Culture (knowledge of Anishinaabe traditions and culture, knowledge of one's own traditions and culture, knowledge of others' traditions and cultures, culture of work, culture of academic disciplines and/or respect for global diversity.)

Upon completion of this course, the student will be able to:

Learning Outcomes	Competencies (CAC)	Cultural Standards
Translate among verbal, numeric, symbolic and graphical forms of mathematics.	C	2
Solve authentic, multistep problems in a variety of contexts by applying two or more mathematical strategies or concepts.	C	1
Apply appropriate formulas to solve problems.	C	
Support answers by providing appropriate mathematical justifications.	B, C	4
Create graphical representations of quantitative information and equations.	B, C	
Interpret and communicate quantitative information, quantitative relationships, and mathematical concepts using appropriate mathematical language for the context.	B, C	
Evaluate expressions involving real numbers.	C	
Solve linear equations and inequalities in one variable	C	
Interpret graphs and data displays.	B, C	

WINHEC Cultural Standards:

1. **GIKENDAASOWIN – *Knowing knowledge*:** To develop human beings who value knowledge, learning, and critical thinking and are able to effectively use the language, knowledge, and skills central to an Ojibwe-Anishinaabe way of knowing.
2. **GWAYAKWAADIZIWIN – *Living a balanced way*:** To develop balanced human beings who are reflective, informed learners who understand the interrelatedness of human society and the natural environment, recognize the importance of living in harmony with creation, and are able to apply a systems approach to understanding and deciding on a course of action.
3. **ZOONGIDE'EWIN – *Strong hearted*:** To increase the students' capacity to live and walk with a strong heart, humble and open to new ideas and courageous enough to confront the accepted truths of history and society.
4. **AANGWAAMIZIWIN – *Diligence and caution*:** To develop students' capacity to proceed carefully, after identifying, discussing, and reflecting on the logical and ethical dimensions of political, social, and personal life.
5. **DEBWEWIN – *Honesty and integrity*:** To increase students' capacity to think and act with honesty and integrity as they understand and face the realities of increasingly interdependent nations and people.
6. **ZAAGI' IDIWIN – *Loving and Caring*:** To encourage students' acceptance of the diversity within their school, community, and environment by developing healthy, caring relationships built on respect for all.
7. **ZHAWENINDIWIN – *Compassion*:** To expand students' knowledge of the human condition and human cultures and the importance of compassion especially in relation to behavior, ideas, and values expressed in the works of human imagination and thought.

16. **Minnesota Transfer Curriculum (MnTC):** List which goal area(s) – up to two – this course fulfills.

See www.mntransfer.org

Goal Area(s): _____

Provide the specific learning outcomes as listed on the mntransfer.org website that pertain to this course.

17. Are there any additional licensing/certification requirements involved?

_____ Yes No

Provide the required documentation to show course meets required licensing/certification standards.

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