Syllabus MAT 142H2 College Mathematics

Course Information

Course Prefix/Number: **MAT 142H Section 2**
Semester: **Spring 2020**
Course Title: **College Mathematics**
Credit Hours: **4**

Class Days/Times: **Thu 5:30P – 8:00P**
Place: **PHX-GSK Virtual**

Instructor Information

Name: **Shreya Kelly**
E-mail: **skelly@tocc.edu**

Office location: **classroom (TBD)**
Office hours: **immediately before the class**

Course Objectives

1) Basic Operations with Whole Numbers and Decimals
2) Exponents, Roots, and Powers of 10Multimedia Textbook
3) Order of Operations and Problem Solving
4) Multiples and Factors
5) Equivalent Fractions and Decimals
6) Adding and Subtracting Fractions and Mixed Numbers
7) Multiplying and Dividing Fractions and Mixed Numbers
8) Reading Circle, Bar, and Line Graphs
9) Measures of Central Tendency
10) Measures of Dispersion
11) Counting Techniques and Simple Probabilities
12) Variable Notation
13) Solving Linear Equations
14) Solving Linear Equations with Fractions and Decimals by Clearing the Denominators
15) Inequalities and Sets
16) Solving Linear Inequalities
17) Solving Compound Inequalities
18) Graphical Representation of Linear Equations and Functions
19) Graphing Linear Equations and Inequalities in Two Variables Using Alternative Methods
20) Slope
21) Linear Equation of a Line
22) Solving Systems of Linear Equations and Inequalities Graphically
23) Solving Systems of Linear Equations Using the Addition Method
24) Solving Systems of Linear Equations Using the Substitution Method
25) Problem Solving Using Systems of Linear Equations
26) Laws of Exponents
27) Polynomials
28) Basic Operations with Polynomials
29) Irrational Numbers and Real Numbers
30) Simplifying Irrational Expressions
31) Basic Operations with Square - Root Radicals
32) Complex and Imaginary Numbers
33) The Distributive Property and Common Factors
34) Factoring Special Products
35) Factoring General Trinomials
36) Simplifying Rational Expressions

37) Multiplying and Dividing Rational Expressions
38) Adding and Subtracting Rational Expressions
39) Solving Equations and Inequalities with Rational Expressions
40) Solving Quadratic Equations by the Square - Root Method
41) Solving Quadratic Equations by Factoring
42) Solving Quadratic Equations by Completing the Square or Using the Formula
43) Graphing Quadratic Functions
44) Solving Higher - Degree Equations by Factoring
45) Solving Quadratic Inequalities
46) Solving Equations and Inequalities Containing One Absolute - Value Term
47) Exponential Expressions, Equations, and Formulas
48) Logarithmic Expressions, Equations, and Formulas

Tentative Schedule

	Date	Text	Activity	Homework (Pearson's MyLab)
1	Thu Jan 16	Chapter 1		
2	Thu Jan 23	Chapter 2	Quiz 1	HW1 Due Jan 22
3	Thu Jan 30	Chapter 3	Quiz 2	HW2 Due Jan 29
4	Thu Feb 6			
5	Thu Feb 13	Chapter 4	Quiz 3	HW3 Due Feb 12
6	Thu Feb 20	Chapter 5	Quiz 4	HW4 Due Feb 19
7	Thu Feb 27	Chapter 6	Quiz 5	HW5 Due Feb 26
8	Thu Mar 5	Chapter 7	Quiz 6	HW6 Due Mar 4
9	Thu Mar 12	Chapters 1-7	Midterm	HW7 Due Mar 11
March 16-20 Spring Break: NO CLASSES				
10	Thu Mar 26	Chapter 8		
11	Thu April 2	Chapter 9	Quiz 8	HW8 Due Apr 1
12	Thu April 9	Chapter 10	Quiz 9	HW9 Due Apr 8
13	Thu April 16	Chapter 11	Quiz 10	HW10 Due Apr 15
14	Thu April 23	Chapter 12	Quiz 11	HW11 Due Apr 22
15	Thu April 30		Quiz 12, Review for Final Exam	HW12 Due Apr 29
16	Thu May 7		Final Exam	

Course Structure

This course will be operating on a combination of **class activity, quizzes and lectures** that will enhance the student's knowledge of mathematical concepts. Some of this work will need

to be done outside of class utilizing TOCC Canvas (https://tocc.instructure.com/login/canvas).

Text and Materials

- **[Required]** College Mathematics, Ready To Go MyLab Course, 9E ISBN-9780136116325 (e book)
- **[Required]** A Ti84 or above calculator in every class.
- **[Required]** A laptop in every class.

Course Evaluation

Grades will be determined using the following scale:

Category	Weight
Quizzes	30%
Misterm	30%
Comprehensive Final Exam	30%
Homework	10%
Total	**100%**

Himdag Cultural Component

My interpretation of what Nahban said in the *Desert Smells Like Rain* is this: while the *himdag* discourages direct, exact answers, in the mathematical world, one is expected to be able to come up with a precise answer for the situation. That being said, there are a few common issues shared:

- *Baban* (coyotes) are not going to affect your homework or my tests – they didn't write either.
- While one must go through a maze to see *i'itoi*, there was no mention as to how many mazes there were to get to him. Likewise, you will discover in this course that there are many different ways to perform the algebra necessary to see the final answer.
- *I-we:tma*: for your success and the college's and the community's, you should not go work on mathematics alone – it can be a group activity (except on the tests, of course).
- *T-pik elida*: we respect each other and ourselves. We respect and take pride in our own work. We respect each other's abilities, quirks and privacy.

Policies and Expectations

Student Conduct

- Please be respectful of myself and other students in the class. Disruptive behavior may result in you being asked to leave the class. This includes but is not limited to talking, eating, rustling papers, clicking on electronics, texting or playing with your phone, late arrival and early departures (late arrival to class disrupts the learning activities and is unprofessional and disrespectful towards fellow classmates), any abusive or indecent language. Collegial behavior is required at all times. Turn off cell phones, PDAs, iPods, laptops, and other electronic devices not related to the course before entering the class.

- Cheating in my class is unacceptable. If you are caught cheating, you will be given a zero on that exam or quiz and may result in my filing an Academic Honesty Incident Report which could result in suspension or expulsion from the college.

E-mail Requirement

- All students must activate and regularly check their Tohono O'odham Community College e-mail account. It is mandatory that students use the TOCC e-mail account for all communications with the instructor.
- The instructor will not reply to any non-TOCC e-mail address the student uses to contact him.

Homework

- Each week, there will be a collection of homework/practice problems in Canvas. Please submit by the following Wednesday in MyLab (online homework).

Quizzes

- Each Thursday, you will complete a timed quiz consisting of questions over the previous week's material in the classroom by logging into Canvas. My hope is that students will work through the previous week's homework problems. There will be **no make-up quizzes**. However, at the end of the semester, I will drop your lowest quiz grade.

Exams

- There will be one timed **Midterm** and one timed **comprehensive Final Exam**.
- There will be **no make-up exams**.

Participation

- You are encouraged to ask questions in the classroom.

Important Dates

- Drop/Full Refund deadline is **Tuesday, Jan 28th 2020**.
- Withdrawal deadline is **Monday Mar 30th 2020**.

Final Grades

They will be sent to the address on record. Per FERPA and the Himdag, I will not give grades over the phone and am strongly discouraged from emailing same. (Again, see *t-pik elida* above.)

DISCLAIMER: This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.