



Syllabus MAT 122 Intermediate Algebra

Course Information

Course Prefix/Number: **MAT 122 Section 2**
Semester: **Spring 2018**
Course Title: **Intermediate Algebra**
Credit Hours: **3**

Class Days/Times: **MW 5:30P - 6:45P**
Place: **Central Campus, Building 500, RM 501**

Instructor Information

Name: **Isaac M. Furlonge**

Phone/Voice mail:
E-mail: **ifurlonge@toocc.edu**
Office hours: **By appointment only**

Course Description

Basic algebraic functions. Includes the language of sets, lines in the plane, systems of linear equations, rational expressions and equations, radical expressions and equations, quadratics, exponents, and logarithms.

Course Objectives

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

- Calculate the slopes of lines; determine equations of lines, and graph lines.
- Given two points in the plane, find the distance and midpoint between them.
- Solve systems of linear equations in three variables algebraically.
- Solve compound inequalities in one variable and graph linear inequalities in two variables.
- Solve absolute value equations and inequalities.
- Factor polynomials using advanced techniques and solve related equations.
- Simplify rational expressions, including complex rational expressions.
- Solve rational equations involving quadratic equations.
- Simplify radical expressions, convert between radicals and rational exponents, and solve radical equations.
- Solve quadratic equations using completing the square and the quadratic formula; interpret the discriminant.
- Graph parabolas.
- Solve literal equations.
- Convert between exponential and logarithmic forms.
- Evaluate exponential expressions and logarithmic expressions.
- Graph elementary exponential equations.
- Define and identify a function and use function notation.

Student Learning Outcomes

After completion of the course students will be able to:

- Solve linear, absolute value, quadratic, rational, and radical equations, linear and absolute value inequalities, and linear systems in two and three variables.
- Graph linear, quadratic, and elementary exponential equations, and linear inequalities.
- Solve problems involving real world applications.

Course Structure

This course will be operating on a combination of traditional lecture, group activity, and discussions that will enhance the student's knowledge of mathematical concepts.

Text and Materials

- [Required] Registration in the *EducoSoft* website (www.educosoft.com). An access code must be purchased through the college's bookstore.

Course Evaluation

Attendance	10%
Homework	10%
Quizzes	15%
Exams	25%
Mid-term Exam	20%
Comprehensive Final Exam	20%
Total	100%

Points	Grade
90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 59%	D
0 - 59%	F

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'ittoi*, 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.

Attendance

- Students are required to attend class regularly and on time (10% of course grade). Attendance is noted if you are reasonably tardy (i.e. 10 minutes), and if you stay in the classroom for the entire class meeting. A student will be considered absent if more than 15 minutes late.
- If you are absent from class, you must complete (before the next class meeting) the online tutorial(s) for the work covered in class. This is required to count for attendance.
- The student is responsible for any work missed during an absence (and please do not ask the question "Did I miss anything *important* in class last time?")
- Accommodations will be made for college-sanctioned absences; in all such instances, I follow college policy.
- If you are the victim of an emergency or an illness, please remain in contact with me by email or phone.

Homework

- As you might expect, homework is the essential ingredient in a math grade (10% of course grade) and will be assigned daily.
- Homework can be found under the assessments tab in www.educosoft.com. It is due one week from the day assigned unless otherwise specified. Thus if a problem is assigned on Wednesday during class, it is due the next Wednesday at the beginning of class.
- Each homework assignment has a maximum of two attempts.
- Note: It is the student's responsibility to ensure that homework is submitted within the given time limit and by the due date.
- Absolutely **no late homework** will be accepted.

Quizzes

- Online quizzes (15% of course grade) will be given during the semester.
- All quizzes are "timed quizzes" and will close on the due dates. The amount of time given for each quiz varies depending upon the number of questions.
- You can attempt each quiz up to two times and the highest grade will be used for your score.
- Note: It is the student's responsibility to ensure that a quiz is submitted within the given time limit and by the due date.
- There will be **no make-up quizzes**.

Exams

- There will be at most **five online exams (25% of course grade)** during the semester.
- Students are allowed two attempts on each exam and must be completed during the designated testing dates.
- There will be **no make-up exams**. Should an exam be missed then the final will replace that exam, if two exams are missed then one will be posted as a "0".

Mid-term Exam

- A mid-term exam **(20% of course grade)** will be given in class on **Wednesday March 7th, 2018**.
- A **make-up exam** will be given only in extreme circumstances and if you have valid, documentable proof justifying your absence, such as a doctor's note explaining a bad illness, police report verifying a car accident or a death certificate of an immediate family member (family trips out of town and a car that wouldn't start do not qualify for make-up exams). For official TOCC business, such as a business trip, a team activity, (e.g., a sports event where you are a participant), you must produce the relevant official documentation noting your absence

Final Exam

- The final exam **(20% of course grade)** will be a comprehensive test over all the material covered during the semester and will be held in class on **Monday May 7th, 2018 from 3:00P - 4:15P**.
- Missing the final exam should not be considered an option. This includes non-refundable airline tickets.
- During the mid-term and final exams students may only use hand-held calculators whose capabilities do not extend beyond the four basic operations.

Important Dates

- Drop/Full Refund deadline is **Friday January 26th, 2018**.
- Withdrawal deadline is **Friday March 30th, 2018**.

Incompletes

- Incompletes (I): The nature of this course (where you are learning something new every single class) makes it very improbable for an incomplete to be given. However, per TOCC policy, if you have completed $\frac{3}{4}$ of the course and specifically request it, I may consider it. Please call before final exams to assure enough time to consider your request.
- In handing out an incomplete:
 - I am assuming that the student will finish this course on his/her own time.
 - You will receive the form with the "I" grade filled in, with a request as to what *must* be done to complete the course.
 - You have one year to complete the work, else the grade will revert to an F.

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.