MAT 122: Intermediate Algebra

Class Days/Times/Room: 1:05 pm to 2:20 pm Monday and Wednesday / *lu:nas c miaklos* **room 2, former A building / *gewkdag so:n ki*,** Main/S-cuk To:k Campus	Spring (*hu:kalig*) 2018

Instructor: Richard LEE	Regular Phone: 520 383 0062 Cell Phone/Voice Mail: 520 205 2123 (text acceptable: be professional!) E-mail: rlee@tocc.edu or rlee@glasscity.net Office location: Faculty Building / Ha-Maṣcamḏam Ha-Ki 121 Office hours: Tuesday and Thursday afternoons (*times to be announced*), other days as needed

Course Description:
Basic algebraic functions, including 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:

During this course students will

1. Add, subtract, multiply and divide numbers in the real number system.
2. **Solve** (linear, rational, radical, quadratic, exponential and logarithmic) equations and inequalities, both in isolation and in the context of story problems and real-life applications. Realize that some equations and inequalities may have no solution – or infinitely many of them.
3. Visualize equations by graphing.
4. Add, subtract, multiply and divide expressions.

Student Learning Outcomes (SLOs) :

After completion of the course students will be able to

- Use the skills of arithmetic and algebra, in isolation and in application, with and without technologies (including but not restricted to calculators and computer programs).
- Express themselves visually (in graphing functions and) in presenting their answers to real-life problems.

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. Some of this work will need to be done outside of class.

Texts and Materials:
We will be using the EducoSoft online homework program - you will need to purchase a code at the bookstore. A calculator is required.

Evaluation and Grading & Assignments:
Two tests at 100 points = 200 - while calculating devices are allowed, you will need to know how to express **exact** answers and to **draw** free-hand graphs.
One comprehensive final exam = 100
Quizzes - weekly, based on questions I assign from homework = worth 200 altogether

An A requires 500 x .9 = 450 points. A B will require 500 x .8 = 400 points.

***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. (Certainly beats the classic "My dog ate my homework!")
- 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 that there are many different ways to perform the math necessary to see the final answer.
- *I-we:tma*: for your success, the college's and the community's, DO NOT work alone – it is a group activity (except on the tests, of course).
- *T-Wohocudadag c t-apedag c t-pik elida*: We learn for our well-being. We respect each other, ourselves and our community. We respect and take pride in our own work. We respect each other's abilities, quirks and privacy. We believe in ourselves and others.

Prerequisites and destinations:
To be in this class, you must have
- passed math 092 here with a C or better
- tested into this class with a suitable COMPASS score (41 to 65 in Algebra) or succesor Accuplacer score (104 and above in Elementary Algebra or 45 to 69 in College Mathematics)
- obtained permission of the instructor, usually after review of previous coursework

Upon successful completion of this course, you will be taking either:
- math 142: Topics in College Mathematics, or
- math 151: College Algebra

It is STRONGLY recommended that you have either completed or are taking WRT 101 (or equivalent) for this and any higher mathematics course.

Policies and expectations-
- *T-apedag*: The Government does require me to take it for financial aid purposes. I understand if you miss class for legitimate reasons: E-mailing me and contacting the front office **5203838401** are the best ways of letting me know if you miss class. You still are responsible for any material covered in class. ***If you're sick, look out for yourself first, just let me know if you're not coming in, eh?***
- Integrity and Honor: I don't mind if you work on the homework in groups. In fact, I expect it. (See *i-we:tma* above.) I do mind for tests and the final exam. Everything else about this topic is available in *the TOCC Student Handbook*.
- Homework and Feedback: We are adults: Although I expect homework to be done as soon as the topic(s) are covered, I understand that it may be late. Just get it done, really. I will try to return homework within one class – not every question will be checked, but I will be using what you have done wrong as a springboard for class. (If you're wondering how I can get away with accepting late homework, we do have a thing called a test. ☺) For this semester, you should spend 3 credit hrs x 3 hrs per credit hr = **9** hours a week on this course.
- Withdrawal: Final deadline is **March 30th 2018**. By that date, you will have had at least one test. As a general rule, if you have been absent more than 25% of the time (8 classes), you should speak with an adviser immediately. *All institutions of higher education (public, private, religious, tribal) strongly encourage instructors NEVER to ask students to withdraw from a course for both financial aid purposes and respect for the student*. (See *t-pik elida* on previous page.) Again, there will be a midterm, a final and homework.
- Incompletes (I): This course's nature (you learn something new every class) makes them awkward. However, per TOCC policy, if you have completed ¾ 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 will assume that you:
    - will finish this course on your own time.
    - will receive a form with the I grade filled in and what work *must* be done to complete the course.
    - will have one year to complete the work, else the grade will revert to an F.
- Makeups: My homework policy has been mentioned beforehand. As for exams, I allow a *reasonable* amount of time – not more than two weeks.
- **Final grades will be available online via Jenzabar**. Per FERPA and the Himdag, I will not give grades over the phone and am strongly discouraged from e-mailing same. (Again, see *t-pik elida* above.)
- Struggling? Tutoring and assistance are available in the Student Success Center in the main building / *i-we:mta ki* and from me during office hours..
- **In accordance with *t-pik elida*:**
    - the Americans with Disability Act 1990 (ADA) and Section 504 of the Rehabilitation Act: if you have a learning problem, physical disability, or medical illness that requires you to have any special arrangements, please inform your instructor at the beginning of the semester so your academic performance will not suffer because of the disability or handicap.
    - Title IX: Tohono O'odham Community College faculty and all staff are dedicated to creating a safe and supportive campus. Title IX and our school policy prohibit discrimination on the basis of sex - this includes sexual misconduct; harassment, stalking, domestic and dating violence and sexual assault. Sexual discrimination and sexual violence can undermine students' academic success and quality of life on campus and beyond. We encourage students who have experienced any form of sexual misconduct to talk about their experience and seek the support they need. Confidential support and academic advocacy can be found with: Christie Kelly, MA, Counselor/Title IX Coordinator ckelly@tocc.edu
    - Please be advised - the iPads are **our college's property** and should be available next semester for other students. (1/23/18)

Consolidated Course Outline and Homework Assignments. -- This is definitely subject to change, especially if we go farther. All exams will be in class, on paper.

Day	Date	Sections	Hw Due
Wednesday	1/17/2018	Class Overview	
Monday	1/22/2018	1.1 - 1.2	
Wednesday	1/24/2018	1.3 - 1.4	
Monday	1/29/2018	2.1 - 2.2	Chapter 1
Wednesday	1/31/2018	2.3 - 2.4	
Monday	2/5/2018	2.5 - 2.6	
Wednesday	2/7/2018	2.7 to 2.9	Chapter 2
Monday	2/12/2018	3.1 - 3.2	
Wednesday	2/14/2018	review for test 1	
Monday	2/19/2018	President's Day	no class
Wednesday	2/21/2018	Test 1 on Chapters 1 and 2	
Monday	2/26/2018	3.3	
Wednesday	2/28/2018	3.4	
Monday	3/5/2018	3.5	
Wednesday	3/7/2018	3.6	
Monday	3/12/2018	Spring Break	no class
Wednesday	3/14/2018	Spring Break	no class
Monday	3/19/2018	4.1	Chapter 3
Wednesday	3/21/2018	4.2	
Monday	3/26/2018	4.3	
Wednesday	3/28/2018	4.4	
Monday	4/2/2018	review for test 2	
Wednesday	4/4/2018	Test 2 on Chapters 3 and 4	Chapter 4
Monday	4/9/2018	5.1	
Wednesday	4/11/2018	5.2	
Monday	4/16/2018	5.3	
Wednesday	4/18/2018	5.4	
Monday	4/23/2018	5.6	
Wednesday	4/25/2018	6.1	Chapter 5
Monday	4/30/2018	6.2	
Wednesday	5/2/2018	Work on Homework	Chapter 6
Monday	5/7/2018	Review Final Exam	
Wednesday	5/9/2018	Final Exam	

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.

References:

- Guarin, Jorge. (2011.) *Course syllabus.*
- Hronopoulos, Sophia. (2012.) *Course syllabus.*
- Nabhan, Gary Paul. (1982.) *The Desert Smells Like Rain: A naturalist in Papago Indian Country.* San Francisco: North Point Press.
- Newberry, Teresa. (2012.) *Course syllabus.*
- Sun-bat, Catherine. (2014.) *Course syllabus*
- Tohono O'odham Community College core values website http://www.tocc.edu/core_values.htm (2015.)

Assignment	Date	Score
Test 1	2/21/2018	
Test 2	4/4/2018	
Final	5/9/2018	
Homework / Quizzes / Attendance	various	(___ total points earned / ___ total points attempted) * 200 =
Total		Add the numbers you have in this column = _____