

Syllabus: **MAT 082 Basic Mathematics**

Course Information

Course Prefix/Number: **MAT 082 Section 2**

Semester: **Fall 2016**

Course Title: **Basic Mathematics**

Credit Hours: **3**

Class Days/Times: **MW 5:30P – 6:45P**

Place: **GSK-A3, Main Campus**

Instructor Information

Name: **Isaac M. Furlonge**

Phone/Voice mail: **520.383.0085**

E-mail: **ifurlonge@tocc.edu**

Office location: **Room 118, Faculty Offices**

Office hours: **MW 10:30A – 12:30P, 1:30P – 2:30P**

TR 2:00P – 3:30P

Other times available by appointment.

Course Description

Fundamentals and applications of arithmetic, including operations of whole numbers, integers, fractions, decimals, ratio/proportion, percent and measurement.

Course Objectives

During this course students will

- Add, subtract, multiply and divide whole numbers, decimals and fractions both in isolation and in the context of story problems and real-life applications.
- Identify place values for whole numbers and decimals.
- Round numbers of all types (whole numbers, fractions and decimals) and use rounded numbers to estimate answers to problems.
- Factor whole numbers into prime factors.
- Use ratio and proportion and solve percentage problems.
- Use both customary and metric systems of measurement.
- Other topics as time allows.

Student Learning Outcomes

After completion of the course students will be able to

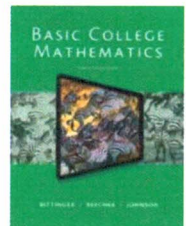
- Use the skills of arithmetic and algebra, in isolation and in application, with and without technologies (including but not restricted to calculators and computer programs).

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. A large portion of this work will need to be done outside of class.

Text and Materials

- [Required] *Basic College Mathematics*. Bittinger/Beecher/Johnson, 12th Edition (E-Text), Pearson. ISBN-13: 978-0-321-92509-1. The entire textbook is available online in printable electronic form through <https://www.vitalsource.com/>
- [Required] A calculator that is NOT on a cell phone.



Evaluation and Grading & Assignments

Attendance (31 days@ 5 points each)	10%
Homework (each @ 8 points)	10%
Quizzes (8 @ 15 points each)	15%
Exams (4 @ 100 points each)	40%
Comprehensive Final Exam	25%
Total	100%

Points	Grade
90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	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'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.

Attendance

- There are 31 class meetings and you are expected to arrive on time and stay for the entire lecture. For each class meeting that you attend you will earn 5 participation points (10% of course grade). Points are earned if you are on time (not eligible for points if more than 15 minutes late), and if you stay in the classroom for the entire class meeting.
- No participation points are awarded for an absence (excused or unexcused).
- The student is responsible for any work missed during an absence. Notes should be obtained from a classmate.

Homework

- As you might expect, homework is the essential ingredient in a math grade (10% of course grade) and will be assigned daily. It is due the day after unless otherwise specified.
- Assignments should be written clearly and stapled if there are multiple pages with your name, instructor's name and the class (MAT 122 Section 2). Put the problems in the order they were assigned.
- You are permitted to work together on the homework, but you must write up your own solutions to be turned in. They should not be identical to your study partner's.
- Absolutely no late homework will be accepted.
- Each homework assignment is worth 8 points – all work must be shown. In order to get the full 8 points, all problems must be attempted, not necessarily correct. (I can tell if you made an effort or not). If most of the work is done, you get a 6, NOT an 8. If few problems are attempted, you get a 4 or 2.

Quizzes

- There are 11 timed in-class quizzes which will be given at the start of class on the following days: August 22 & 29, September 14, 21 & 28, October 10, 17 & 24, November 7, 14 & 21, 2016.
- Quiz problems will be similar to homework and in-class problems.
- Each quiz will be worth 15 points (15% of course grade).
- There will be no make-up quizzes. Your three lowest quiz scores will be dropped.

Exams

- There will be four exams (40% of course grade) during the semester given on Wednesday September 7th, Monday October 3rd, Monday October 31st, and Monday November 28th, 2016.
- 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 "O".

Final Exam

- The final exam (25% of course grade) will be held in class on Monday, December 5th from 5:30P – 6:45P.
- The final exam will be a comprehensive test over all the material covered during the semester.

Important Dates

- Drop/Full Refund deadline is Monday August 29th, 2016.
- Withdrawal deadline is Wednesday October 26th, 2016.

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.

References:

- Lee, Richard (2013) *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*.