Syllabus: *Math 187 Precalculus*

Course Information	
Course Prefix/Number: Math 187	Credit Hours: 5
Semester: Spring 2018	Course Title: Precalculus
Class Days/Times: Monday & Wednesday 9:00 AM to 11:05 AM	Room: A 3
Mandatory Meeting:**T&TH 11:00 AM–11:30 AM** **1:30 PM – 2:00 PM** **or by appointment.**	

Instructor Information: Name: Jorge Guarin	Phone/Voice Mail: (520) 383-0101 E-mail: jguarin@tocc.edu (Prefered) Office location: Main Campus Building A Office hours: To Be Determined

Course Description:
   College-level algebra and trigonometry. Includes equations, algebraic and transcendental functions, inequalities, systems of equations, conic sections, sequences and series, trigonometric functions, polar form, calculator use, and partial fractions. Also includes intensive preparation for analytic geometry and calculus.

Course Objectives:
   During this course students will
1. Solve quadratic, quadratic in form, absolute value, polynomial, rational, literal, and radical equations.
2. Define a function by ordered pairs, a graph, and algebraically; use function operations and inverses; use transformations and determine symmetry.
3. Graph polynomial and rational functions; predict the nature of the zeros of a quadratic function, and reconstruct a polynomial from its given zeros.
4. Solve polynomial, rational, and absolute value inequalities.
5. Graph exponential and logarithmic functions; solve exponential and logarithmic equations; and use curve fitting for explanation of arithmetic models.
6. Convert between radians and degrees measures; define, graph, and evaluate the six trigonometric functions and their inverses; solve trigonometric equations algebraically; and use trigonometric identities to simplify expressions and solve equations.
7. Use the standard equations for conic sections and sketch their graphs; identify types of conic sections and determine their features.
8. Graph polar equations; convert between rectangular and polar coordinates; obtain polar form of complex numbers and convert between the polar form and the standard form.
9. Solve linear systems algebraically, graphically, and using matrices; solve nonlinear systems graphically and algebraically.

10. Find the nth term of a sequence; calculate partial sums of arithmetic and geometric sequences; and use the Binomial Theorem to expand powers of binomials.

Student Learning Outcomes (SLOs) :
After completion of the course students will be able to
- Perform operations with functions with/without the use of iPads / graphing calculators.

- Create a mathematical project using PowerPoint.

- Employ technology to set up and solve real world situations.

Himdag Cultural Component:
Mathematics faculty's interpretation of what Nahban said in the "Desert Smells Like Rain" is this: While the Himdag discourages direct, exact answers, in the mathematical world, my students are expected to be able to come up with a precise answer for the situation. As a community college closely associated with the Tohono O'odham Nation, TOCC encourages growth of students' cultural knowledge and my class takes steps to transmit learning mathematics in a way that respects the Tohono O'odham Himdag.

Texts and Materials:
An iPad is required for this class**. Checking out and returning an Ipad from the Library is a requirement to obtain a grade in this class.**
Required Text: Pre Calculus. Publisher: EDUCO and it is available on the EDUCO site To enter to this site, students need to get the **ACCESS CODE** from the library.
APPS: The "Free GraCalc 2" and "My script calc" apps can be downloaded from the Apple store..

Evaluation and Grading & Assignments:

Attendance:
The attendance policy for this class is simple and it gives you 10% of your grade . You are all adults who have in some form paid for this class. If you do not wish to come to any session, you do not have to attend. However, you are still responsible for completing work on time. If you are late for class, enter quietly and sit down. You will not be allowed to make up any quiz you miss because of tardiness. In case of a valid emergency, email your instructor using the information given on the first page. After receiving the email, the instructor will decide whether or not can give you an excused absebce.

Academic Integrity: Violations of scholastic ethics are considered serious offenses by Tohono O'odham Community College, the Mathematics Department, and by your instructor. Students may consult the TOCC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure.
[*a*] All homework can be done independently or with other students. The purpose of homework is to develop critical thinking skills and also to develop specific skills related to teaching mathematics by repeated practice of these skills. Without this practice most students find it impossible to perform well in this class. No collaboration is tolerated during exams in-class exams.
[*b*] Students are expected to abide by the Student Code of Conduct and the Scholastic Code of Conduct found in the Tohono O'odham Community College Student Handbook. Copies are available at the main student bookstore.

Course Feedback:
Homework by Sections, Chapter Tests. Practice Chapter Tests, Practice Final Exam and Final Exam have been posted on the EDUCO site: www.educosoft.com. All materials submitted will be graded and they scores returned inmediately after they are submitted. Students can take up to 3 times any homework, Test or Final Exam. Higher score will be recorded. Datelines for every assignment is on the site. Once the assignment expires, it is removed and you can not continue taking it..

Homework Policy:
Homework has been assigned and it is posted on the EDUCO site: Each one comes with its own dateline. You mist submit the homework before its dateline.

Withdrawals:
Please be sure to withdraw yourself by **March 30, 2018** if you do not expect to complete the class, otherwise you may receive an "F" grade.

Workload:
Students are expected to spend an average of 18 hours per week attending class sessions, doing assignments and preparing for exams. The standard Carnegie Unit of college credit assigns one credit hour for each 15 hours of class time and assumes that students spend two hours working outside the classroom for each hour of classroom instruction. For a three-credit semester course, this translates to an average of 6 hours spent outside of class weekly for 16 weeks.

Grading System/Policies:

Your final grade will be calculated as follows:			Grading Scale	
Attendance	100 points	10%	A =	1000 - 900 points
Homework assignments	200 points	20%	B =	899 - 800 points
Chapter Tests	300 points	30%	C =	799 - 700 points
Tutorial Time	200 points	20%	D =	699 – 600 points
Final Exam	200 points	20%	F =	less than 600 points
Total possible	1,000 points	100%		

Incomplete (I) grade:
To receive an " I " grade, you must have finished at least 3/4 of the course requirements and specifically request the grade. Please call before the last week of class to be sure that there is sufficient time to consider your request. An incomplete grade generally implies that a student has shown sufficient initiative to complete the course on his or her own. You will receive a copy of the standard "I" form filed with the grade. This form details specifically what must be done to complete the course. A student has one year to complete the required work, after which the grade automatically reverts to an "F."

Make-up Assignments:
No make-up assignments will be given and no late assignments will be accepted unless the student has made arrangements with the instructor.

Extra Credit Opportunities: Do not ask for extra credit opportunities until you have completed all of the required assignments to date. The instructor will occasionally give extra credit homework, quiz, and exam questions that test critical thinking skills.

Final Grades: Students will receive a grade transcript from the college mailed to the address given with registration materials at the end of the semester when all grades have been recorded. At any time, at the EDUCO site, educosoft.com you are able to see your grade.

SPECIAL NOTE TO STUDENT: For privacy and security reasons, instructors are advised **NOT** to give grades over the telephone.

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.

#	Day	Date	Sections	Hw Due	Test
			Class Overview		
1	Wednesday	1/17/2018	1.1 - 1.2		
2	Monday	1/22/2018	1.3 - 1.4	1.1 - 1.2	
3	Wednesday	1/24/2018	1.5 - 1.6	1.3 - 1.4	
4	Monday	1/29/2018	Review 1.7 - 1.9	1.5 - 1.6	
T1			Ch 1: 1.1 - 1.6		Chap 1
5	Wednesday	1/31/2018	2.1 - 2.2		
6	Monday	2/5/2018	2.3 - 2.4	2.1 - 2.2	
7	Wednesday	2/7/2018	2.5 - 2.6	2.3 - 2.4	
8	Monday	2/12/2018	Review 2.7 - 2.9	2.5 - 2.6	
T2			Ch 2: 2.1 - 2.6		Chap 2
9	Wednesday	2/14/2018	3.1 -3.2		
NC	Monday	2/19/2018	President's Day		
10	Wednesday	2/21/2018	3.3 - 3.4	3.1 - 3.2	
11	Monday	2/26/2018	3.5 - 3.6	3.3 - 3.4	
12	Wednesday	2/28/2018	3.7 & Review 3.8-3.10	3.5 - 3.7	
T3			Ch 3: 3.1 - 3.7		Chap 3
13	Monday	3/5/2018	4.1 - 4.2		
14	Wednesday	3/7/2018	4.3 - 4.4	4.1 - 4.2	
NC	Monday	3/12/2018	Spring Break		
NC	Wednesday	3/14/2018	Spring Break		
15	Monday	3/19/2018	4.5 - 4.6	4.3 - 4.4	
16	Wednesday	3/21/2018	Review 4.7 - 4.8	4.5 - 4.6	
T4			Ch 4: 4.1 - 4.6		Chap 4
17	Monday	3/26/2018	5.1 - 5.2		
18	Wednesday	3/28/2018	5.3 - 5.4	5.1 - 5.2	
19	Monday	4/2/2018	5.5 - 5.6	5.3 - 5.4	
20	Wednesday	4/4/2018	Review 5.7 - 5.9	5.5 - 5.6	
T5			Ch 5: 5.1 - 5.6		Chap 5
21	Monday	4/9/2018	6.1 - 6.2		
22	Wednesday	4/11/2018	6.3 - 6.4	6.1 - 6.2	
23	Monday	4/16/2018	6.5 - 6.6	6.3 - 6.4	
24	Wednesday	4/18/2018	Review 6.7 - 6.9	6.5 - 6.6	
T6			Ch 6: 6.1 - 6.6		Chap 6
25	Monday	4/23/2018	7.1 - 7.2		
26	Wednesday	4/25/2018	7.3 - 7.4	7.1 - 7.2	
27	Monday	4/30/2018	7.5 - 7.6	7.3 - 7.4	
28	Wednesday	5/2/2018	Review 7.7 - 7.9	7.5 - 7.6	
T7			Ch 7: 7.1 - 7.6		Chap 7
29	Monday	5/7/2018	Review Final Exam		
FE	Wednesday	5/9/2018	1.1 - 7.6	Final	Exam

Acknowledgment of Receipt of Syllabus

Date: January 17, 2018

Please read, sign and return the following acknowledgment to me in class, *or* return to me at the following address:

Jorge Guarin
Tohono O'odham Community College
P.O. Box 3129
Sells, AZ 85634

☐   I have received my MAT 187 syllabus (including course objectives, policies, requirements and schedule) and have read and understood all the enclosed materials

☐   I have no objection to receiving an occasional call from the instructor at the number given with my registration materials.

☐   I prefer that the instructor not call or contact me by phone anytime during the semester.

My reason(s) for taking this course:
_____
_____
_____

My background in this area includes:
_____
_____
_____

☐   I would like to be contacted by the instructor regarding the following concerns:
_____
_____
_____
_____

_____   _____
Print Name Clearly Here   Sign Name Here

_____   _____
Student ID Number   Telephone Number

_____   _____
Current Mailing Address/City/State/Zip   E-mail Address