Syllabus: *Math 231 Calculus II*

Course Information

Course Prefix/Number: Mat 231	Credit Hours: 4
Semester: Fall 2016	Course Title: Calculus II
Class Days/Times: Monday - Wednesday	Room: A 3
11:30 AM – 1:10 PM	

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

Course Description:
   Continuation of MAT 220. Includes differentiation and integration of logarithmic and exponential functions, techniques and applications of integration and infinite series.

Course Objectives:
   During this course students will
   1. Define, know the properties of, differentiate and integrate the logarithmic function.
   2. Define, differentiate, and integrate the exponential function.
   3. Apply L'Hopital's Rule.
   4. Define, differentiate, and integrate all the inverse trig functions.
   5. Integrate rational functions.
   6. Integrate products involving powers of the trig functions.
   7. Apply completing the square, algebraic substitution and trig substitution to simplify integration.
   8. Integrate by using partial fractions or by parts.
   9. Evaluate improper integrals.
   10. Define and determine convergence of an infinite sequence.
   11. Recognize and evaluate geometric, telescoping, harmonic, and p-series.
   12. Define infinite series. Determine convergence and absolute convergence of series using the divergence, integral, ratio, root, comparison, limit comparison and alternating series tests.
   13. Define a power series, determine its radius and interval of convergence.
   14. Construct Taylor and Maclaurin series and use them for approximations
   .   15. Integrate and differentiate power series.

Student Learning Outcomes (SLOs) :
  After completion of the course students will be able to
- Solve area problems with the use of technology (iPad and Fundamental Theorem of Calculus).
- Create mathematical projects using PowerPoint.
- Employ technology to set up and solve real world situations using calculus.

Texts and Materials:
Required Text: Calculus: Early Transcendentals, 5th Edition, by Larson & Edwards.
ISBN: 13 9781111171698. Publisher: Cengage Learning. Checking out and returning an Ipad is a requirement to obtain a grade in this class. APPS: The "Free GraCalc" app is recommended.

Evaluation and Grading & Assignments:
  Attendance:
The attendance policy for this class is simple. 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, contact the instructor using the information given on the first page. After filling out an absence form, the instructor will decide whether or not the work missed can be made up.

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:
All materials submitted will be graded and returned the next class period after they are submitted.

Homework Policy:
Homework will be assigned each class period and is due at the beginning of the next class period before the quiz. The solutions to all odd-numbered problems in the text are given in the back of the textbook. Homework sets will contain both even and odd-numbered problems. Problem sets will be graded according to the attached rubric. An example of a 10-point assignment is also attached. Late homework will not be accepted unless the student has made an arrangement with the instructor before it is to be turned in.

Withdrawals:
Please be sure to withdraw yourself by **October 26, 2016** 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 12 hours spent outside of class weekly for 8 weeks.

Grading System/Policies:

Your final grade will be calculated as follows:		Grading Scale	
4 homework assignments	200 points		
4 quizzes	200 points	A =	1000 - 900 points
4 tests	300 points	B =	899 - 800 points
1 project	100 points	C =	799 - 700 points
1 final exam	200 points	D =	699 - 600 points
Total possible	1000 points	F =	less than 600 points

Incomplete (I) grade:
To receive an " I " grade, you must have finished at least 1/2 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.

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

Acknowledgment of Receipt of Syllabus

Date: _____

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 231 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