MAT 182: Plane Trigonometry – Scottsdale Community College

(Instructor reserves the right to make changes on this syllabus as needed)

SLN: 18672 Spring 2009 **Class time:** TTh 5:15 – 6:45 PM

Instructor: Patricia Dueck **Office Hours:** TBA
Office: CM 429

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Web Address: http://www.scottsdalecc.edu/dueck/

Text: *Functions Modeling Change: A Preparation for Calculus, third edition,* Connally, Hughes-Hallett, Gleason, et al. Wiley Publishers 2007. A Student *Study Guide* and *Solution Manual* is available online from www.wiley.com

Prerequisites: Students entering MAT 182 are expected to have completed MAT 150 or its equivalent with a grade of A, B or C.

Cell Phones, etc.: Upon entering class all cell phones and other objects of tech communication need to be turned off. If there is a true emergency call you are expecting, let the instructor know before class. You will forfeit your attendance point if your cell phone goes off during class.

Attendance is expected. You are to be in class every day it is scheduled. You *may* be dropped after three absences. You are expected to be in class on time. You are expected to stay the full length of class once you come to class. If you have a legitimate need to leave class early, please notify your instructor before class starts.

Graphing Calculator: A graphing calculator is required for this course. The suggested calculator is the TI-83 or TI-84. Please bring the calculator to class daily. Renting a calculator is possible through Student Life (north end of the Student Center building). The cost is $10 per semester. Calculators with QWERTY keyboards or those which do symbolic algebra such at the TI-92s or TI-89s ***cannot*** be used during an exam. **Internet and e-mail** access is required for each student.

Exams: There will be 3 midterm exams given during the semester. These exams will involve a mix of mechanical skills and conceptual reasoning. The best possible preparation for the exams is regular attendance and completion of assigned homework. **Your calculator program memory may be randomly viewed during any exam and will be cleared if anything suspicious is written therein.** There are ***no make-up exams*** unless you have a valid excuse accompanied with documentation or you have spoken with the instructor before the day of the exam. You have ***one week*** to complete the make-up exam and you will receive a 10% reduction in points regardless of the excuse. You may only make up one exam during the semester. The second missed exam will receive a grade of 0 (zero). Exams are never curved.

Homework, Quizzes & Projects: Homework will be assigned daily. Students may work together on homework, but each individual student should complete and write up their own work as much as possible. There will be daily homework quizzes given. They will be worth 5 points every day. You will be given a problem number from your homework to complete using *only* your homework and it will be graded for correctness. Two of the lowest homework quizzes will be dropped at the end of the semester. There also may be group quizzes or different kinds of individual quizzes at other times in the semester. ***No make-up quizzes are allowed*** . Projects are assigned in class at various times and are completed in groups.

Tutor Center: The Math/Science Tutor Center in CM 441A will be open M-Th 8:00 PM - 2:30 PM, M-Th 4:30 PM - 7 PM. Come for help before it is too late, and several days before an exam day. Office hours are also held in order for the instructor to provide individual help outside of class.

Final Exam: The final exam will be given in your regular classroom, CM 467 on Tuesday, May 6, 6:00 – 7:50 PM. There will be no make-ups given for the final, and no finals will be rescheduled for personal reasons, including nonrefundable airplane tickets.

Assigning of Grades: Your grade is NOT a commodity; it has not been purchased with your tuition. You have the right to be graded fairly, but you do NOT have the right to any specific grade. Your grade is not a reflection of you as a person. Your grade is not a measurement of effort. Your grade is an evaluation of PERFORMANCE. This means it is dependent upon how well you demonstrate your comprehension of the subject through application and completion of the items listed above and below in this syllabus.

Percent Allocation		**Grades**
3 Midterm exams:	**60%**	**A: 90% - 100%**
Final exam:	**20%**	**B: 80% - 89%**
Homework Quizzes/Projects:	**20%**	**C: 70% - 79%**
		D: 60% - 69%

Homework Quiz Point Allocation	
Quiz Correctness:	**+4**
Attendance:	**+1**

Exam	**Dates**	**Topics on exam**
Exam 1	**Thursday February 26, 2009**	**Sections 6.1 – 6.4 and Extra**
Exam 2	**Tuesday April 7, 2009**	**Sections 6.5 – 6.7 and Chapter 7**
Exam 3	**Thursday April 30, 2009**	**Chapter 10**
Final Exam	**Tuesday May 12, 2009 4:00 – 5:50 PM**	**Cumulative**

Official Course Description: MCCCD Approval: 04/22/97

MAT182 19976-99999 LEC 3 Credit(s) 3 Period(s)

Plane Trigonometry

A study of measures of angles, properties of graphs of trigonometric functions, fundamental identities, addition and half-angle formulas, inverse trigonometric functions, solutions of trigonometric equations, complex numbers and properties of triangle solution. May receive credit for only one of the following: MAT182 or MAT187. Prerequisites: Grade of "C" or better in MAT150, or MAT151, or MAT152, or equivalent, or concurrent registration in MAT150, or MAT151, MAT152, or satisfactory score on District placement exam.

MCCCD Official Course Competencies:

MAT182 19976-99999 Plane Trigonometry

1. Identify a trigonometric function. (I)
2. Use the definitions and properties of trigonometric functions to solve problems. (I)
3. Find the length of an arc. (II)
4. Determine the area of a sector. (II)
5. Find linear and angular velocity. (II)
6. Determine the graph and period of a trigonometric function. (III)
7. Evaluate inverse trigonometric functions. (IV)
8. Verify trigonometric identities. (V)
9. Solve trigonometric equations. (VI)
10. Use trigonometric formulas to solve application problems. (VII)
11. Find nth roots of complex numbers. (VIII)

Departmental and College Policies and Procedures

- Unrestricted withdrawal: Friday, March 6, 2009
- Restricted withdrawal: Monday, April 27, 2009

Unrestricted Withdrawal: A student may withdraw from a course with a grade of W during the unrestricted withdrawal period. The instructor's signature is not required.

Restricted Withdrawal. In order to withdraw during this period, the student must obtain the instructor's signature. A grade of W will be assigned only if the student is doing acceptable work at the time of the request. Otherwise the student may receive an F.

Grade of Incomplete: A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents the student who is doing acceptable work from completing a small percentage of the course requirements. The guidelines in the general SCC catalog regarding a grade of incomplete will be strictly followed.

Instructor-Initiated Drop: At the instructor's discretion, any student who has not attended class regularly *may* be administratively dropped from the course. However, students should be aware that non-attendance would ***NOT automatically*** result in their being dropped from the course. Thus, a student should not assume they are no longer registered for a course simply because they are not attending. It is the student's responsibility to be aware of their registration status.

Final Exam Make-up Policy: The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the Department Chair and for one of the following reasons:

1. religious conflict (e.g., the student celebrates the Sabbath on Saturday)
2. the student has more that three exams scheduled on the same day as the math final
3. there is a time conflict between the math final and another final exam.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and make up the final within one calendar year. The student must provide written documentation and be passing the class at the time to receive an Incomplete. Make-up exams will NOT be given for reasons of nonrefundable airline tickets, vacation plans, work schedules, weddings, family reunions, and other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

Honor Policy: The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the College or other sanctions as specified in the Scottsdale Community College Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism or facilitating such activities.

Disability Resources and Services has a mission to provide equal access to students with disabilities in all areas of teaching and learning, and all services while encouraging independence and supporting cultural diversity throughout the campus. If a student wishes to receive services and/or accommodations, he/she ***must*** contact the DRS office at (480)423-6517.

Plane Trigonometry – Dueck
Spring 2009 Calendar
(Instructor reserves the right to make changes on this schedule)

Week	Monday	Tuesday	Wednesday	Thursday	Friday
02/02 - 02/06		Intro., 6.1		6.2	
02/09 - 02/13		6.3		Arc length and Area of a Sector	
02/16 - 02/20		Angular vs. Linear Velocity		6.4	
02/23 - 02/27	President's Day	**Review**		**Exam 1**	
03/02 - 03/06		6.5		6.5	*
03/09 - 03/13		6.6		6.7	
03/16 - 03/20	Spring Break	Spring Break	Spring Break	Spring Break	Spring Break
03/23 - 03/27		7.2		7.3	
03/30 – 04/03		7.1 (no typo)		**Review**	
04/06 - 04/10		**Exam 2**		10.1, 10.2	
04/13 - 04/17		10.2		10.3, 10.4	
04/20 - 04/24		(10.3), 10.4		(10.3), 10.5	
04/27 - 05/01	**	**Review**		**Exam 3**	
05/04 - 05/08		7.5, 7.6		**Review for Final**	
05/11 - 05/15		**Final Exam 4:00 – 5:50 PM**			

***Last day for student withdrawal without instructor's signature**
****** Last day for student withdrawal with instructor's signature**

Homework Quiz Example

Name: _____

MAT 182 - Homework Quiz 1
5 points - 5 minutes

Below is listed one problem from your homework. Using your homework, write out the complete solution to the problem showing all the work necessary to come up with a result. Use the back if needed. You will be graded on correctness.

Section 6.3, #21

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Reading and Comprehension of the Syllabus

I _____ have completely read and fully understand the syllabus for the course MAT _____ as taught by Patricia Dueck. I understand the consequences of not attending class, not completing homework, and not sitting for an exam. I also understand what is required of me if I need to miss an exam I expect to have my grade calculated fairly and according to the percentages given on the syllabus.

Signed: _____

Trigonometry – Spring 2009 Assignment List

(Instructor reserves the right to make changes to this list)

Section	Read then Solve	Practice Problems
6.1		1, 2, 3, 5, 9, 11, 13, 17, 19, 21, 23, 24, 26, 27
6.2	1, 2	3, 4, 7, 9, 15, 26, 27, 29, 32
6.3	25	1, 3, 5, 7, 24, 26, 27, 29, 34, 37, 38, 39, 40, 42
Extra 1		In class handout
Extra 2		In class handout
6.4	4 - 6 all, 12-15 all	3, 6, 9, 16, 18, 19, 20 (make sure you do the problems from the reading: 4 - 6 all, 12-15 all)
6.5	21	7, 8, 9, 10, 11, 12, 15, 25, 27
6.6	1, 4, 12	1 -12 all, 32, 34 / 13 - 16 all, 23, 27, 37, 38
6.7	7, 8	3, 4, 9, 10, 15, 16, 31, 33, 35, 41, 44, 45, 47, 49, 50, 52
7.2		5, 7, 10, 13 (We did 12(b) in class), 15, 17, 18, 23, 31 (start with the right side and make it look like the left side), 35, 41, 42, 43, 44,
7.3	1	4 (use blue box pg 322 for 1 and 4), 5, 7, 9, 22, 24, 27
7.1	1	Use the Law of Cosines only: 1, 7, 20, 23, 3, 9, 12, 13, 30, 33, 37, 38
7.4	1	<---- try hard to do this problem and read the section especially pp. 329 – 331
10.1		1 - 4 all, 6, 7, 11, 12, 13, 16, 18, 20
10.2	1	2, 4, 5, 7, 8, 13-16 all, 18, 19, 21, 23-28 all
10.3	1	1, 2, 4, 8, 9, 11, 13, 15, 18
10.4	1	2, 3, 6, 7, 9, 10, 11, 12, 13, 18, 22, 24
10.5	1, ***Bring your calculator!! We will learn to do matrices on the calculator!!***	2, 5, 8, 11, 12
7.5		17, 21, 23, 29, 35, 38, 39, 42, 43, 44, 45
7.6		TBA