South Plains College   Department of Mathematics and Engineering
Math 2412: PreCalculus
Section 001: MW 2:30-4:35 Math 126
Spring 2018 Course Syllabus

Instructor: Jennifer K Bartlett   **Email**: jkbartlett@southplainscollege.edu
Office: Levelland Campus Math 113   **Office Hours:** MW 1:00-2:30, TR 10:00-11:00, F 9:00 – 12:00,
Telephone: (806)716-2664   or by appointment!

Credit: 4 hours   **Lecture:** 3 hours **Lab:** 1 hour   This course satisfies the Mathematics core curriculum requirement.

Course Description: This course covers the study of algebraic, polynomial, rational, exponential, and logarithmic/trigonometric functions. Topics in analytic geometry are covered.

Course Objectives: The objective of this course is to acquaint the student with solutions to different mathematical problems. The course covers algebra, trigonometry, and analytic geometry.

Student Learning Outcome/Competencies: Upon successful completion of this course students will:
1) Demonstrate and apply knowledge of properties of functions
2) Recognize and apply algebraic and transcendental functions and solve related equations.
3) Apply graphing techniques to algebraic and transcendental functions.
4) Compute the values of trigonometric function for key angles in all quadrats of the unit circle measured in both degrees and radians
5) Prove trigonometric identities
6) Solve right and oblique triangles

Core Objectives:
     Communication Skills: effective development, interpretation, and expression of ideas through written, oral and visual communication
- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through written communication
- Develop, interpret, and express ideas through written communication

     Critical Thinking: creative thinking, innovation, inquiry, analysis, evaluation, and synthesis of information
- Generate and communicate ideas by combining, changing, and reapplying existing information
- Gather and assess information relevant to a question
- Analyze, evaluate, and synthesize information

     Empirical and Quantitative Competency Skills: the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
- Manipulate and analyze numerical data and arrive at an informed conclusion
- Manipulate and analyze observable facts and arrive at an informed conclusion

Course Materials:
- Textbook: *Pre-Calculus*, by Neal, Gustafson, and Hughes, 2013, Cengage Learning. (ISBN-13: 978-0-495-82662-0) (ISBN-10: 0-495-82662-6)
- Calculator: You are <u>required</u> to bring your calculator to EVERY class. You may use a plain scientific calculator on most homework, quizzes, and exams. You may NOT use a graphing calculator or a calculator on a cell phone on any of the quizzes, exams, or the final exam. No sharing of calculators is allowed.
- You will need a 3-ring binder (1.5 inch), dividers, loose paper, graph paper, hole punch, stapler, textbook, pencils, and erasers.

Methods of Learning Assessment: Students will be continually assessed throughout the course via in-class group work, questioning, and board work. Other methods of assessment include:

- **Attendance:** Attendance and effort are crucial for success in this course. It is your responsibility to make sure that I have marked you present for each class. Class attendance may be taken at any time during the class period, so please do not arrive late or leave early. Leaving early and being tardy will be considered ½ absence. You may be dropped from this course with a grade of X or F if you are absent four consecutive days or if you accrue five absences for any reason throughout the semester. Absences are not classified as 'excused' or 'unexcused'. If you should incur an absence, please refer to your syllabus, contact the instructor, or contact another student to get the assignment completed BEFORE the next class. Late homework and makeup quizzes are not an option. The last day for student-initiated drops is Thursday, April 26th.
- **Homework:** Homework will be assigned at each class meeting. The homework is not a tool by which I torture you, but rather an opportunity for you to practice the skills presented in class which you will be responsible to demonstrate on a quiz the following class period. If you are interested in passing the class, you will need to do well on the quizzes. To do well on the quizzes, you will need to complete the homework. No late assignments will be accepted. You should show all work when doing homework. Simply writing the problem and the answer is not "doing homework." Using a solutions manual or an app that shows you the steps, and copying them down is NOT "doing homework." Remember your effort is key to your success. You have to focus your effort on being able to complete the problems on a quiz/exam without any outside resources. You are responsible for the following homework requirements. Any homework that does not follow the homework requirements will be recorded as a grade of a zero.

  Homework Requirements:

  1) It must be turned in at the beginning of the class period. Late homework will not be accepted. Late is defined to be: anything turned in after the start of the class period.

  2) Homework must be written in pencil on white 8.5 x 11 inch paper. It must be neat and legible. I will be the judge as to what is neat. Just because you can read it doesn't mean that I can interpret it.

  4) If you have more than one page to turn in, the pages must be stapled together by section. Multiple pages that are not stapled or held together by a paperclip, folded corner, spit, gum, etc. will not be accepted and be recorded with a grade of zero. You must staple multiple pages together.

  5) Homework must be presented in an orderly manner with the problem running in a single or double column down the page.

  6) All final answers must be circled to receive credit. Any algebraic answer not circled or "boxed" in will not be graded. Pictures/graphs do not need to be circled or boxed.

  7) If you have an assignment where you have to graph something, the ENTIRE ASSIGNEMENT must be on graph paper.
- **Notebook:** You will be required to keep all class materials (notes, handouts, homework, quizzes, and exams) organized in a notebook (3-ring binder). These materials are subject to be turned in for grading at any time. Please make certain all materials accompany you to each class meeting. The notebook will have 4 dividers labeled the following: Notes, Homework, Quizzes, and Exams. You will keep the corresponding material under the matching divider.
- **Quizzes:** Short, in-class quizzes that will be given regularly will have problems selected from, or closely related to, your homework. Most, if not all, quizzes will be pop-quizzes so you will need to be prepared every class period. Students arriving late may be denied the chance to take a quiz, if there is one that day. Quizzes must be taken in pencil.
- **Exams:** Exams must be taken in pencil. The tentative exam dates are as follows:

Exam 1: Chapter 1	Monday, February 5th
Exam 2: Chapter 2 & 3	Monday, February 26th
Exam 3: Chapters 4 & 5	Monday, April 9th
Exam 4: Chapter 6 & 8	Monday, April 30th
- **Final:** The comprehensive final will be given on Monday, May 7th from 1:00-3:00 as directed by the official South Plains College Schedule. No make-up final will be given. The final will cover all material covered in-class including chapters 1, 2, 3, 4, 5, 6, 8.
- **Make-up:** Make-up work is given at the discretion of the instructor. NO make-up quizzes or tests are given without prior notification AND proper documentation. If are absent from class, have given prior notification and proper documentation of your absence, you MUST make arrangements to take the quiz or test BEFORE the next class period. Students who do not take quizzes or exams in-class, early or late, forfeit the right to attempt any extra credit on that quiz or exam.

Grading Policy:

Daily Work (HW, quizzes, notebook)	16%	90-100%	A
Exams (4 total)	16% each (64% total)	80-89%	B
Comprehensive Final	20%	70-79%	C
		60-69%	D

Grading Scale:

This course and its grade will be recorded on your official transcript. Below 60% F

Grade will be posted on Blackboard during the semester.

Student Responsibilities and Expectations:
1. Come to class on time and prepared to learn. (Pencils, homework, notebook, calculator)
2. Read the syllabus.
3. Take notes, participate in class, and complete course assignments early enough to seek help if needed.
4. Food and drink are not allowed in class, with the exception of bottled water.
5. Cell phones and any other electronic devices must be silenced and put away before entering the classroom. Use of these devices during class will result in a zero for that day's quiz, homework, or exam.

Resources:
- I am your first and BEST resource for this class! Feel free to come by during my office hours or email me at jkbartlett@southplainscollege.edu .
- Blackboard is the online course management system that will be used for this course. The course syllabus as well as any other class handouts can be accessed through Blackboard. Login at http://southplainscollege.blackboard.com . The user name and password should be the same as the MySPC and SPC email.
    User name: first initial, last name, and last 4 digits of the Student ID
    Password: Original Campus Connect Pin No. (found on SPC acceptance letter)
- Free tutoring is available in M116 on the Levelland campus. Hours for the tutors will be posted by the door of M116.
- Form study groups: Networking is an essential tool both in the classroom and in the workforce!
- Your book that you have already purchased
- Websites that contain helpful videos: patrickjmt.com   khanacademy.com

Religious Holy Days: In accordance with Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15) days of the semester in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code. (copied from current South Plains College catalog)

Equal Opportunity: South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.

Disability Statement: Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland Student Health & Wellness Center 806-716-2577, Reese Center (also covers ATC) Building 8: 806-716-4675, Plainview Center Main Office: 806-716-4302 or 806-296-9611, or the Health and Wellness main number at 806-716-2529.

Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to the SPC policy at: (http://www.southplainscollege.edu/human_resources/policy_procedure/hhc.php).
Pursuant to PC 46.035, the open carrying of handguns is prohibited on all South Plains College campuses. Report violations to the College Police Department at 806-716-2396 or 9-1-1.

Sexual Misconduct Statement: As a faculty member, I am deeply invested in the well-being of each student I teach. I am here to assist you with your work in this course. If you come to me with other non-course-related concerns, I will do my best to help.
It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct. That means that I cannot keep information about sexual misconduct confidential if you share that information with me. Dr. Lynne Cleavinger, the Director of Health & Wellness, can advise you confidentially as can any counselor in the Health & Wellness Center. They can also help you access other resources on campus and in the local community. You can reach Dr. Cleavinger at 716-2563 or lcleavinger@southplainscollege.edu or go by the Health and Wellness Center. You can schedule an appointment with a counselor by calling 716-2529.

Math 2412 Homework: This is subject to change.

Section	Page	Problem Numbers	Due Date
1.1	122	13, 17, 19, 31, 35, 39, 67, 69, 71, 75, 77, 83, 85	1/22
1.2	135	31, 33, 35, 37, 39, 70, 73, 77, 83, 91, 94, 99	1/24
1.3	150	19, 25, 27, 31, 33, 34, 48, 49	1/24
1.4	164	41, 44, 47, 53, 56, 59, 62, 69	1/29
1.5	181	29, 35, 41, 49, 55, 59, 64, 65, 73, 75, 83, 86	1/29
1.6	193	13, 14, 15, 16, 19, 23, 47, 49, 56, 57, 61, 65, 67, 69 (on 56-69 don't find the domains)	1/31
1.7	205	26, 29, 33, 35, 37, 39, 42, 61, 64, 75	1/31
2.1	234	31, 34, 37, 40, 43, 46, 49, 52, 55, 57, 63, 64, 71, 77	2/7
2.2	251	35, 37, 42, 44, 47, 51, 55, 57, 59, 61, 63	2/12
2.3	265	37, 41, 45, 49, 57, 59, 61	2/12
2.4	276	9 (no graph, just find all zeros), 23, 25, 27, 78, 79	2/14
2.5	297	14, 15, 19, 24, 25, 27, 29, 31, 33, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 59, 62, 63, 75, 77, 89	2/14
2.6	308	21, 23, 25, 27, 31, 37, 41, 45, 55, 59, 63, 67	2/19
3.3	358	19, 21, 23, 27, 29, 31	2/19
3.5	376	33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 71	2/19
3.6	391	27, 29, 33, 35, 39, 61, 65, 69, 79, 83, 87, 91, 95, 107, 108, 110	2/21
4.1	418	25, 27, 29, 31, 33, 35, 37, 45, 49, 53, 57, 63, 67, 71, 75, 79, 83, 93, 97, 101	2/28
4.2	440	79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 101, 105, 109, 113, 117, 121, 125	3/5
4.3	455	21, 25, 29, 33, 37, 41, 45, 49, 51, 53, 57, 61, 65, 87, 91, 95, 99, 103, 107	3/5
4.4	476	21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 67, 69	3/19
4.5	491	13, 17, 21, 25, 29, 37, 41, 45	3/19
5.1	522	9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57, 61, 65, 69, 73	3/21
5.3	536	35, 39, 43, 47, 51, 55, 59, 63, 67, 71, 75, 79, 83, 87, 91, 97, 101, 109	3/21
5.4	549	5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 51, 57, 61, 67, 70	3/26
5.5	561	5, 9, 13, 17, 35, 39, 43, 47, 51, 55, 59, 63, 67, 71, 75, 83, 85, 87	3/26
5.7	583	15, 19, 23, 27, 31, 35, 39, 43, 47, 51, 55, 59, 63, 67, 71, 75, 79, 83, 87, 91	4/4
6.1	607	5, 9, 13, 17, 21, 25, 29, 33	4/11
6.2	616	3, 4, 5	4/11
6.3	628	5, 9, 13, 17, 21, 25, 29, 31, 33, 41, 44, 47	4/16
6.4	638	5, 9, 13, 17, 21, 25, 31	4/16
8.1	743	27, 31, 39, 45, 49, 59, 62, 71, 73	4/18
8.2	756	39, 41, 53, 65, 73, 79	4/23
8.6	797	13, 17, 21, 25, 29, 33, 35	4/25

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