MATH 58<br>Spring 2018<br>Sara Jones<br>Precalculus Trigonometry<br>MW 9-11 AM 8138<br>sarajones@prodigy.net<br>Office: Shuhaw 1714<br>527-4296<br>1715 Shuhaw<br>Office Hours: Mon. - Thurs. 11-11:30 AM, Tues. and Thurs. 8-9 AM<br>and by appointment<br>E-mail Hours: Tuesday and Wednesday 8:30-9 PM<br>Required Materials:<br>Analytic Trigonometry, Eleventh Edition, by Barnett<br>A Graphing Calculator: TI-84, TI-89 or TI-inspire<br>3 ring binder to keep text, class work and homework<br>\section*{Course Outline and Student Learning Outcomes}<br>https://portal.santarosa.edu/SRWeb/SR_CourseOutlines.aspx?mode=1\&CVID=25130\&Semester=20147

Homework will be collected at the beginning of each class. Each assignment will be worth 10 points: 6 will be based on the Refrigerator Homework problems, and 4 points will be based on your completion of the rest of the problems. Refrigerator homework problems done from the text should be handed in stapled on top of your work and should be well labeled. Both should be done neatly with a two-column format, answers circled, and space left for comments between problems. Refrigerator homework should be so complete, beautiful, and clear enough that it is suitable for display on your refrigerator. For all problems, you must summarize the problem, show all work, and check answer in the back of text. When you finish write the percentage correct on the top, and staple it to the back of your Refrigerator homework. In cases of illness or emergency, late homework will be accepted but will be worth a maximum of 7 points. Please note at the top of a late assignment the date submitted.

Quizzes will be given regularly. Unannounced quizzes may be given at the beginning or end of any class. You should ask for copies of missed quizzes to be completed at home and receive $7 / 10$ credit. Any quiz on which you receive less than half credit may be corrected within a week to get up to half credit. The sum of the quiz grades will be worth a test grade.

In Class Test dates are listed below, and cannot be made up. The final is cumulative. Grade on final can replace a missed test grade. Test points have more weight than homework points.

GRADING: If you want to pass, come to class, do the homework, and see me if you need help!!
Tests (3 exams at 15\% each): ......................................... 45\%
Final Exam ....................................................................... $30 \%$
Daily written homework ................................................. 15\%
Quizzes ........................................................................ $10 \%$
Course grades use the following scale:
A: 90-100
B: 80-89
C: 70-79
D: 60-69
F: 0-59

Example: Mr. Bill has scores of 70, 75, and 90 on his three tests and his final exam score is 70. His homework average is $567 / 600=94.5 \%$ and his quiz average is $100 \%$. His course grade is then $0.15 *(70+75+90)+0.30 * 70+0.15 * 94.5+0.10 * 100=80.4$, a $B$ in the class.

## Dates to remember:

| January 15 | MLK Day No class |
| :---: | :---: |
| February 14, | Test 1 |
| February 19, | Presidents' Day No class |
| March 19-23, | Spring Break |
| March 28, | Test 2 |
| May 2 | Test 3 |
| May 23, ............................................ | Final |

Assistance can be found at the Mathematics Computer Lab, the MESA center, and the Tutorial Center in the Library, in my office, or via e-mail.

- The Math Department office has a list of private tutors. This list can be found on the Math Department web site at https://mathematics.santarosa.edu/tutor-list
- If you need disability related accommodations for this class, such as a note taker, test taking services, special furniture, use of service animal, etc., please provide the Authorization for Academic Accommodations (AAA letter) from the Disability Resources Department (DRD) to me as soon as possible. You may also speak with me privately during office hours about your accommodations. If you have not received authorization from DRD, it is recommended that you contact them directly. DRD is located in Bertolini Student Center, Third Floor, Room 4844 on the Santa Rosa campus, and the Petaluma Village on the Petaluma Campus.


## Homework Hints

- Check odd answers in the back of your book. If you are assigned an even problem and don't know what the answer should include, look at the previous odd answer for the correct form.
- Ask for help before the class in which the assignment is due. I am happy to help.
- Write in complete sentences and equations. Learn the correct notation and symbols as soon as possible.
- Collaborate with a classmate to check answers and work on the problems.
- Fold paper to form two columns. Circle or box Answers. Leave blank space between problem for corrections and comments.


## Classroom Conduct

- Please turn off and put away all phones, pagers, music, etc. upon entering class. If I see or hear your phone or any other electronic device during class besides your calculator, you will be asked to leave class for the day. You will not be able to make up any work missed.
- If you are caught cheating, you will receive a zero for that test/assignment. You will also be suspended from class for two class meetings and you will not be allowed to make up any missed work. If you are caught cheating there will also be a letter written to the Vice President of Student Services to report the incident. The Vice President may then take additional disciplinary action ranging from reprimand to expulsion.
- The SRJC Rights and Responsibilities for students can be found at the following site:
https://studentlife.santarosa.edu/rights-and-responsibilities


## Student Success

- Come to class ready to learn.
- Make sure you eat, sleep and exercise.
- Read the material that will be covered before and after class.
- Always complete homework on time.
- Turn in all homework and quizzes.
- If you miss class, contact me via e-mail immediately to schedule and make up any missed work.
- Do a little homework each day.
- Work for this class will take between 4 and 6 hours outside of class each week. Be sure to schedule time to complete this work at the beginning of the semester.
- Enlist support from employers and loved ones right now.
- Get to know and work with classmates outside of class time.
- Keep a binder containing all classwork and record grades on Homework Assignment Sheet
- Use pencil ONLY and erase your mistakes.
- Health issues (physical and mental) can interfere with your academic success. Student Health Services is here to support you. Details are at shs.santarosa.edu.


## Emergency Evacuation Plan

In the event of an emergency during class that requires evacuation of the building, please leave the class immediately and calmly. Our class will meet on the lawn in front of Shuhaw to make sure everyone got out of the building safely and to receive further instructions. If you are a student with a disability who may need assistance in an evacuation, please see me as soon as possible to discuss an evacuation plan.

| 8138 | Spring 2018 | Jones | 1:30-3:30 PM 1715 Shuhaw |
| :---: | :---: | :---: | :---: |
| Math 58 | Monday |  | Wednesday |
| 1/15 | MLK Day No class | 1/17 | 1.1 Angles, Degrees, Arcs |
| 1/22 | 1.2 Similar Triangles <br> 1.3 Trigonometric Ratios and Right Triangles | 1/24 | 1.4 Right Triangle Applications |
| 1/29 | 2.1 Degrees and Radians | 1/31 | 2.2 Linear and Angular Velocity |
| 2/5 | 2.3 Trigonometric Functions: Unit Circle Approach | 2/7 | 2.5 Exact Values and Properties of Trigonometric Functions |
| 2/12 | Review | 2/14 | Test 1 |
| 2/19 | Presidents Day No Class | 2/21 | 3.1 and 3.2 Graphing |
| 2/26 | 3.3 Graphing | 2/28 | 3.5 Graphing the Sum of Functions |
| 3/5 | 3.6 CoTrig Functions Revisited <br> 4.1 Fundamental Identities | 3/7 | 4.2 Verifying Trigonometric Identities |
| 3/12 | 4.3 Sum, Difference, and Cofunction Identities | 3/14 | 4.4 Double and Half Angle Identities 4.5 Product-Sum and Sum-Product Identities |
| 3/19 | Spring Break | 3/21 | Spring break |
| 3/26 | Review | 3/28 | Test 2 |
| 4/2 | 5.1 Inverse Sine, Cosine, and Tangent Functions | 4/4 | 5.2 Inverse Cotangent, Secant, and Cosecant Functions |
| 4/9 | 5.3 Trigonometric Equations: <br> An Algebraic Approach | 4/11 | 5.4 Trig Equations and Inequalities: A Graphing Calculator Approach |
| 4/16 | 6.1 Law of Sines | 4/18 | 6.3 Areas of Triangles <br> 6.2 Law of Cosines |
| 4/23 | 6.4 Vectors and Parametric Equations | 4/25 | 6.5 The Dot Product |
| 4/30 | 7.1 Polar and Rectangular Coordinates | 5/2 | Test 3 |
| 5/7 | 7.2 Sketching Polar Equations | 5/9 | 7.3 The Complex Plan |
| 5/14 | 7.4 De Moivre's Theorem and the $n$ th-Root Theorem | 5/16 | Review |
| 5/21 |  | 5/23 | Final |


| 8138 Jones | Spring 2018 | 1:30-3:30 PM 1715 Shuhaw |
| :---: | :---: | :---: |
| Math 58 | Jones | Monday and Wednesday |
| Section | RH Problems | Regular homework |
| GF Handout | 1-10 (all) |  |
| 1.1 | 24,45,52 | p.10: $2,4,15,18,21,27,43,44,48,49,51,61,65,70$ |
| 1.2 | 20,35,42 | p.18: 5, 6, 8, 9, 14, 17, 29, 31, 34, 39 |
| 1.3a | 20,26,42 | p.31: 17, 18, 23, 24, 25, 41, 43, 44, 45, 57 |
| 1.3 b | 22,35,48 | p.31: 19, 21, 22, 28, 31, 32, 33, 34, 47, 60 |
| 1.4 | 18,26,50 | p.41: $1,3,4,6,7,9,13,14,17,27,37,38,43,49,51$ |
| 2.1 | 28, 34, 47 | p.61: $21-27$ (all); 29, 32, 35, 37, 40, 43, 45, 46, 49, 51 |
| 2.1b | 58,74,79 | p. 61: $55,56,57,71,73,85$ |
| 2.2 | 20, 28,33 | p.49: 5, 11, 20, 21, 25, 28 |
| 2.3a | 20, 36, 58 | p.81: $11,12,14,18,21,30,39,51,52,57$ |
| 2.3b | 28,60 | p.81: 9, 23,33, 53, 59, |
| 2.5 | 16, 42, 90 | p.110: 5, 7, 8, 11, 13, 16, 25, 27, 30, 31, 33, 36, 39, 42, 45,74 |
| 3.1 | 10, 24, 30 | p.136: 2, 7, 9, 11, 12, 15, 16; \{19-23\} [all] |
| 3.2 | 18, 29, 38 | p.151: 7, 8, 9, 11, 13, 15, 16, 19, 21, 22, 24, 27, 31-37 all, 64 |
| 3.3 | 22, 27, 42 | p.167: 17, 19, 23, 24, 28, 31-41 all |
| 4.1 | 20, 45, 52 | p.233: $12,15,18,21,44,46,47,49,50$ |
| 4.2 | 32, 59, 78 | p.243: 20, 25, 35, 52, 60, 71, 79 |
| 4.3 | 26, 29, 44 | p.254: 17, 18, 25, 27, 30, 41-45 all |
| 4.4 | 8, 45, 50 | p.263: 1, 4, 7, 15, 26, 46, 49, 51, 69 |
| 5.1a | 20, 33, 74 | p.302: 11, 14, 18, 28, 31, 37, 54, 57, 67 |
| 5.1b | 30, 58, 72 | p.302: $13,16,22,23,27,35,38,53,59,65,69$ |
| 5.3 | 20, 27, 36 | p.324: 11, 14, 15, 18, 21, 24, 30, 33, 39 |
| 6.1a | 18, 34, 50 | p.361: 11, 12, 14, 15, 17, 33, 42 |
| 6.1b | 36, 40, 60 | p.361: 22, 23, 24, 27, 29, 35, 38, 43, 46, 59, 62, 66 |
| 6.2 | 30, 37, 66 | p.372: 15, 16, 21, 22, 27, 33, 36, 51, 59 |
| 6.4a | 20, 32, 50 | p.396: 5, 6, 11, 12, 15, 16, 19, 25, 26, 31, 33, 34, 39, 40, 49 |
| 6.4 b | 38, 74, 78 | p.396: $10,14,28,73,75,77,79$ |
| 6.5 | 18, 30, 46 | p. 407 : $5,6,7,8,11,12,15,16,17,21,26,27,29,33,34,37,45$ |
| 7.1 | 30, 46, 68 | p.429: 6, 9, 13, 16, 23, 25, 26, 29, 31, 32, 35, 37, 38, 41, 47, |
| 7.1 |  | 52, 53, 54, 57, 58, 67, 75 |
| 7.2 | 20, 24, 36 | p.441: 19, 21, 25, 26, 33, 35 |
| 7.3 | 22, 60, 66 | p. 452 : $3,4,5,6,7,10,13,15,18,19,23,19,24,27,51,57,64$ |
| 7.4 | 23, 34, 46, 63 | p.459: 1, 5, 11, 13, 17, 27, 31, 43, 57 |

