Santa Rosa Junior College
Syllabus for SPRING 2018

Course name and number: Math10 (Nature of Mathematics)
Section code: 5101
Class Meeting Days/Times: MW 9:00am—10:30am
Class Location: Shuhaw 1713
Instructor: Dr. Ying Lin
Instructor's webpage: http://www.santarosa.edu/~ylin
Office: Shuhaw 1702
Email: ylin@santarosa.edu
Phone/Voicemail: 707-521-6912
Office hours: see the instructor's webpage

Key dates for the traditional 18-week semester:
Day Class Begins: January 17, 2018
Drop/refund deadline: January 28, 2018
Last Day to Drop without W: February 4, 2018
Last Day to Drop with W: April 22, 2018
Final exam date: Wednesday, May 23 (7:00 – 9:45am)

Course Description:
A survey course in mathematical concepts and mathematics in culture. Topics to include mathematical reasoning and four additional topics selected from number theory, probability, statistics, mathematical modeling, contemporary applications, geometry, and the history of mathematics. Recommended for liberal arts students.

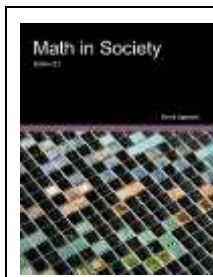**Student Learning Outcomes:** Upon completion of this course students will be able to
1. Apply the principles of inductive and deductive reasoning.
2. Demonstrate proficiency in mathematical skills and conceptual understanding within four of the following topics: number theory, probability, statistics, mathematical modeling, contemporary applications, geometry, and the history of mathematics.
3. Apply mathematical concepts to a variety of real-world problems.
Student Objectives: Upon completion of this course students will be able to
1. Define inductive reasoning, and apply to patterns and sequences.
2. Define deductive reasoning, and apply to logic and sets.
3. Demonstrate ability to perform four of the following objectives:
    A. Define various sets of numbers and use number systems of different bases.
    B. Apply counting techniques, permutations, combinations, and probability models.
    C. Define frequency distributions and measures of central tendency and dispersion, and create graphical displays of data.
    D. Apply mathematical models such as linear, quadratic, exponential, and logarithmic, to real-world problems.
    E. Understand topics within contemporary mathematics, such as voting and apportionment, financial mathematics, graph theory, linear programming, and applications of matrices.
    F. Define and apply concepts of areas, volumes, Euclidean and non-Euclidean geometry, and selected other topics in geometry.
    G. Describe the istorical development of mathematics, the role of theorem and proof in mathematical thought, and significant mathematical results and mathematicians.

Prerequisite: Course Completion of MATH 154 or Course Completion of MATH 155 or higher

Textbook:

	Math in Society, 2nd Edition, by David Lippman. You can access the textbook for free at http://www.opentextbookstore.com/mathinsociety/ You can also order a hard copy from the print-on-demand services like Lulu.com for about $15.

Class website in Canvas:
There is a separate course website hosted by the college. You must have access to the course website in order to read the announcements and online discussions. Additional problem sets, handouts and files will also be distributed through the course website. The class website is linked to the instructor's webpage, and you can log into your Canvas course using your SRJC ID number and PIN code. You can also directly access the login page through http://online.santarosa.edu/Canvas/.

Class Attendance:
Absences, arriving to class late and leaving class early are counterproductive to learning. If you need to leave class early, notify the instructor **before** class starts, sit close to the exit and leave without disturbing the instructor or other students. You are responsible for obtaining any notes, announcements, etc. If you are absent, arrive late to class or leave early during more than 10 percent of the classes, in addition to deduction to your attendance points, you may be withdrawn from the course without notice. Missing the first class may also result in you being withdrawn from the course to allow other students to enroll. Students are responsible for officially withdrawing from the course if they stop attending.

Email:
Email is checked twice a day during business hours only. Please include your course number and class time in the subject of your email. Please type your email using complete sentences in a respectful manner to ensure a timely response.

ADA Compliance Statement:
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 Analy Village on the Santa Rosa campus, and Petaluma Village on the Petaluma Campus.

Grading Policies

Grades		Final Grades	
Homework	13%	90% or higher	A
Class Participation	2%	80% - 90%	B
Group work	10%	70% - 80%	C
Exams (100 pts)	75%	60% - 70%	D
		Less than 60%	F

Incompletes:

The grade of "I" (incomplete) may be requested only with a valid, verifiable excuse and only if the student has successfully completed all but a small portion of the required coursework with a passing grade (at least 70% of the coursework must be complete). A student requesting an incomplete must do so by 24 hours after the final exam. An incomplete may be given only at the discretion of the instructor.

Group Projects: There will be 3-4 group assignments given throughout the semester. Information on each assignment will be given on the course Canvas page, and you will be given at least one week to complete each assignment.

Homework problems and reading will be assigned daily. Late homework will not be accepted unless prior arrangements have been made with me. I am firm on that, but I do drop your lowest non-zero homework scores. Some of your homework will be done online through our course Canvas page, but I strongly encourage you to purchase a notebook to keep detailed notes on your progress.

Midterms:
The three tests will be given in class on the dates noted in the syllabus. All tests are closed book exams. If a formula sheet is allowed, students will be notified before the test. **Tests cannot be made up!** If you miss a test, your comprehensive final exam score can replace the score of up to one missed test.

Final Exam:
The final exam will be a comprehensive exam. It is **not** optional and must be taken on the week of classes during the class time. Make your vacation plans accordingly. The final exam replaces your lowest test score, if the percentage is higher.

- Example 1: you have scored 80 in all three midterms, and 95 in your final. Then you total test/final scores will be 80+80+95+95=350 out of 400 points.
- Example 2: you have scored 80 in all three midterms, and 75 in your final. Then you total test/final scores will be 80+80+80+75=315 out of 400 points.

If you receive less than 60% in the Final Exam, your final letter grade will be lowered by one full letter grade (e.g. from C to a D).

Cheating:
If a student is caught cheating (see the attached Student Code of Conduct), the student will receive a zero for the assignment, quiz or test in violation.

Student Withdrawal "W" Grades
Students may **withdraw** from class without instructor permission and without incurring any grade penalty until the W deadline. This grade may be requested by the student only during the first two-thirds of any session and may be given by the instructor on or before the official census reporting date to students who have ceased attending class before that date. Students who stop attending class after this date may receive a grade of "F."

Final Grades:
Students may check final grades at the online student portal approximately one week after the final exam. For privacy and security reasons, instructors may **not** post, give grades over the telephone or through e-mail. If you need an official grade report in mail, please submit a self-addressed envelope with sufficient postage. During the semester, you accumulated grade points will be available through the MyMathLab and/or Canvas grade book. The last day to report any missing grades is the review session before the final. No more changes will be made to the grade book after this date.

Help:
- Your questions are welcomed both in and out of class. If you cannot resolve your questions in class, I strongly recommend you coming to see me during office hours.
- Assistance can be found in the Mathematics Computer Lab, the MESA center, and the Tutorial Center in the Library.
- The Math Department office has a list of private tutors. This list can also be found on the Math Department web site at www.santarosa.edu/mathematics .

Caveat:
The instructor reserves the right to make changes to the syllabus and will notify students of those changes in class.

Student Conduct
We will conduct ourselves in a manner which reflects our awareness of common standards of decency and the rights of others. All students are expected to know the Student Conduct Code (http://www.santarosa.edu/for_students/rules-regulations/scs/section1.shtml) and adhere to it in this class. Students who violate the code may be suspended from 2 classes and referred to Vice President of Student Services for discipline.

Respect
The best way to learn is through active participation; therefore, we respect others when talking by being on-time, listening actively, and by being polite even when we disagree with another's viewpoint. Please turn off all electronic devices. If you use a laptop for note taking, please sit in the front row with the sound off. No food in class please.

Academic Integrity
All written work is to be original; plagiarism of any kind will result in a failing grade on that assignment. Students who plagiarize or cheat may be suspended [for one or two class meetings by the instructor] and referred to the Vice President of Student Services for discipline sanction, in cases of egregious violation. Please read the college policy/procedure on academic integrity at:
http://www.santarosa.edu/polman/3acadpro/3.11P.pdf

Emergency Evacuation Plan
In the event of an emergency during class that requires evacuation of the building, please leave the class immediately, but 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 the class is on a second or higher floor, provide clear directions to the stairs). If you are a student with a disability who may need assistance in an evacuation, please see me during my office hours as soon as possible so we can discuss an evacuation plan.