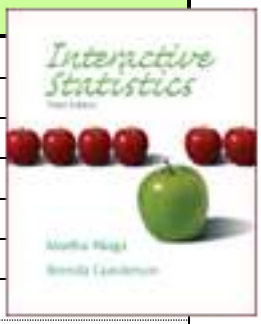
Syllabus for **Math 15-E5117** ***Introduction to Statistics*** – College of the Redwoods – Eureka Campus		
Semester & Year	Fall 2018	
Course ID and Section #	Math 15-E5117	
Instructor's Name	Tami Matsumoto	
Day/Time	MWF 10:05am-11:20am, 8/20/18-12/14/18	
Location	SC 208, at College of the Redwoods Eureka Campus	
Number of Credits/Units	4 units	
Contact Information	*Office location*	SC 205B, behind copier upstairs in SC Bldg
	Office hours	MW 2:30-3:30, plus by chance and by appointment.
	Phone number	Office: (707) 476-4543
	Email address	tami-matsumoto@redwoods.edu Include "**Math 15**" as ***part of*** the email Subject line
	Social Media	https://twitter.com/tamimathcr https://www.facebook.com/TamiMathCR
Textbook Information	*Title & Edition*	***Interactive Statistics***, 3rd Edition
	Author	Aliaga & Gunderson
	ISBN	ISBN-10: 0-13-149756-1; ISBN-13: 978-0-13-149756-6



Math 15 Course Information (excerpted from the Course Outline of Record):

Course Description [*catalog description from course outline of record*]

Math 15 Introduction to Statistics

The study of statistical methods as applied to descriptive statistics and inferential statistics. An emphasis on the meaning and use of statistical significance will be central to the course. Students will use probability techniques to make decisions via hypothesis testing and will estimate parameters using confidence intervals. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. The course includes applications using data from disciplines including business, social sciences, psychology, life science, health science, and education.

Special Note: A TI-83 or TI--84 graphing calculator is required.

Prerequisite: Math 120, or Math 194, or Math 102

Recommended Preparation: Engl 150 or Engl 102

Student Learning Outcomes [*from course outline of record*]

1. Accurately communicate statistical ideas using correct statistical notation, graphs, and vocabulary.
2. Use descriptive and inferential statistics to solve real-world problems.
3. Demonstrate appropriate use of technology in making decisions based upon real-world data.
4. Read and interpret information that contains statistical analysis and be able to communicate these results.
5. Judge the validity of research reported in the mass media and peer reviewed journals.

College of the Redwoods general information (not specific to Math classes)

Special Accommodations

College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disability Services and Programs for Students. Students may make requests for alternative media by contacting DSPS at 707-476-4280.

Academic Support

Academic support is available at Counseling and Advising and includes academic advising and educational planning, Academic Support Center for tutoring and proctored tests, and Extended Opportunity Programs & Services, for eligible students, with advising, assistance, tutoring, and more.

Academic Honesty

In the academic community, the high value placed on truth implies a corresponding intolerance of scholastic dishonesty. In cases involving academic dishonesty, determination of the grade and of the student's status in the course is left primarily to the discretion of the faculty member. In such cases, where the instructor determines that a student has demonstrated academic dishonesty, the student may receive a failing grade for the assignment and/or exam and may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services, and scroll to AP 5500. Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods website.

Disruptive Classroom Behavior

Student behavior or speech that disrupts the instructional setting will not be tolerated. Disruptive conduct may include, but is not limited to: unwarranted interruptions; failure to adhere to instructor's directions; vulgar or obscene language; slurs or other forms of intimidation; and physically or verbally abusive behavior. In such cases where the instructor determines that a student has disrupted the educational process a disruptive student may be temporarily removed from class. In addition, he or she may be reported to the Chief Student Services Officer or designee. The Student Code of Conduct (AP 5500) is available on the College of the Redwoods website at: http://www.redwoods.edu/board/Board-Policies/Chapter-5-Student-Services and scroll to AP 5500.

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods website.

Emergency Procedures for the Eureka campus:

Please review the campus evacuation sites, including the closest site to this classroom (posted by the exit of each room). The Eureka **campus emergency map** is available at: (http://www.redwoods.edu/aboutcr/Eureka-Map; choose the evacuation map option). For more information on Public Safety, go to http://www.redwoods.edu/publicsafety. In an emergency that requires an evacuation of the building:

- Be aware of all marked exits from your area and building.
- Once outside, move to the nearest evacuation point outside your building:
- Keep streets and walkways clear for emergency vehicles and personnel.
- Do not leave campus, unless it has been deemed safe by the Incident Commander or campus authorities. (CR's lower parking lot and Tompkins Hill Rd are within the Tsunami Zone.)

RAVE – College of the Redwoods has implemented an emergency alert system. In the event of an emergency on campus you can receive an alert through your personal email and/or phones at your home, office, and cell. Registration is necessary in order to receive emergency alerts. Please go to https://www.GetRave.com/login/Redwoods and use the "Register" button on the top right portion of the registration page to create an account. During the registration process you can elect to add additional information, such as office phone, home phone, cell phone, and personal email. Please use your CR email address as your primary Registration Email. Your CR email address ends with "redwoods.edu." Please contact Public Safety at 707-476-4112 or security@redwoods.edu if you have any questions.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

In the event of an emergency requiring immediate assistance:

1. Someone in class should **call 9-1-1**: can use telephone at Teachers station or cell phone (if possible). It could take minutes for help to arrive, so
2. someone else in class should also call CR Security's Emergency number: **707-476-4111** – or just dial "**4111**" on the telephone at the Teachers station or at a "Courtesy Phone" – and/or hit the **"Panic Button" on a CR telephone** (Line 2) – to inform CR Security of the emergency.

In case of fire,

- calmly exit the classroom and go down the stairs to leave the building. **Do not use the elevator**.
- At the bottom of the stairs (on either side) **pull the Red Fire Alarm** on the wall near the exit (before exiting the building).

In case of earthquake: **DUCK—COVER—HOLD ON**.

- The parking lot and Highway 101 are in the Tsunami Zone, so **WAIT** until we know whether it is safe to drive away. **Don't just leave!**

In case of Power Outage

- The classroom (and office) telephones probably will NOT work.
- The doors in SC, HU, and Administration Buildings will automatically lock – so if you exit a room and the door closes, the door will automatically lock behind you and card-key won't work

Additional Information about services and help available to CR Students:

Tip Line

Anyone wishing to make an anonymous report of a crime may use the tip line at 707.476.4555
Or by emailing CRTip@redwoods.edu.
See also: https://www.redwoods.edu/publicsafety/How-do-I-File-a-Report

Students get Microsoft Office365 FREE

All CR Students and faculty can get OFFICE 365 for *free* -- for PC, Mac, Smartphone, Tablet – up to 5 devices -- using your @mycr.redwoods.edu email address.

- Go to: http://office.com/getoffice365 (If you get an Error message using the hyperlink, copy and paste the url directly into your browser.)
- Enter your "mycr" student email account (e.g., jdoe555@mycr.redwoods.edu)
- Go into your student email account; click on the verification link in the Microsoft email.
- The link will take you back to the website and you can download the software at that time, OR access the account at a later time via: https://login.microsoftonline.com

See also: https://www.redwoods.edu/online/Help-Student

Mathematica -- symbolic mathematical computation program, sometimes called a computer algebra program, used in many scientific, engineering, mathematical, and computing fields.

All faculty, staff, and students are welcome and are entitled to a free version of Mathematica for personal use. See: https://www.redwoods.edu/math/Mathematica

Associated Students of College of the Redwoods (ASCR)

- ASCR is run by and for CR students. If you aren't involved already, you might like to check it out. See https://www.redwoods.edu/ascr/
- There are many student clubs and organizations. Contact ASCR if you would like to start a new one! https://www.redwoods.edu/ascr/Orgs

Support Classes (a partial list of what's available for students at CR's Eureka campus)

Classes for Academic Support (register in one or more of these to benefit from them)

- Math Lab classes: Drop-in math help, during open hours. There are different math lab class options for Math 15 students: Math 15L or Math 252
- LIGHT Center classes open to all students: GUID 143, 145, 146, 147, 148, 205, 215.
  For information: 476-4290 (Eureka campus)
  NOTE: Many GUID classes can be taken by any students (even if not DSPS)
- ESL classes such as ESL 211 are free and support academic students. You can sign up in class!
- Math Review Courses: Math 301, Math 302, Math 303 – short, 9 hours of class time total
- CIS 210: For help with computers, computer programs/software, such as Excel, Canvas

Student Services (a partial list of what's available for students at CR's Eureka campus)

ACADEMIC SUPPORT AVAILABLE AT CR

- Academic Support Center (ASC) -- variety of services to help students succeed, including free tutoring and proctored testing. https://www.redwoods.edu/asc
    - Testing Center in ASC -- for make-up tests, and when accommodations cannot be made in the regular classroom: https://www.redwoods.edu/asc/Testing-Policies-Procedures/Accomodations
    - Tutoring Services -- free for all CR students, by appointment (you do not need to be enrolled in a Math Lab class to meet with an ASC Tutor). https://www.redwoods.edu/asc/Tutoring-Services
- Calculator Rental -- https://www.redwoods.edu/math/Resources/Calculator-Rentals
- Math Lab -- students must be registered in a Math Lab course to receive math help in the Math Lab. https://www.redwoods.edu/math/Lab There are many sections of MathLab associated with different math classes. Any student can sign up for non-credit Math Lab (Math 252) to get help with math-related work. This course is available at DN, EKA, and KT
- Tutoring and Writing Help: The Eureka Campus ASC provides help and tutoring for writing and many other classes. Tutoring is available, by appointment, to any CR student (you do not have to be registered in a special class). Some special programs (such as TRiO, EOPS, DSPS) also have tutoring available for students in those programs.
- Math Textbooks – many available for check-out from Library; free textbooks online for Math 276, Math 376, Math 380, Math 120. https://www.redwoods.edu/math/Free-Math-Textbooks; also copies of texts in the MathLab class for use while you are there. Some special programs (such as TRiO, EOPS) may have textbooks available for students in those programs.
- Mathematica Software -- https://www.redwoods.edu/math/Mathematica
- Online Practice in Mathematics, "OPTIMATH" -- http://msenux2.redwoods.edu/optimath
- Math Review website -- https://www.redwoods.edu/math/Resources-Algebra-Review

SPECIAL PROGRAMS AT CR

- **CalWORKs** – California Work Opportunity & Responsibility to Kids (CalWORKs) assists students who are parents of children under age 18, who are receiving assistance. https://www.redwoods.edu/calworks
- **DSPS** – Disability Services and Programs for Students (DSPS) is a special program funded by the State of California to provide services, accommodations and classes to students with disabilities. https://www.redwoods.edu/dsps
- **EOPS** – Extended Opportunity Programs and Services (EOPS) is a state-funded program designed to provide financial assistance, support and encouragement for eligible low-income students. https://www.redwoods.edu/eops
- **TRiO** – The TRiO Student Success Program is a multi-faceted support program—offering assistance and encouragement to low-income, first-generation students, and/or students with disabilities. https://www.redwoods.edu/trio
- **Honors Program** – a challenging program designed for successful transfer to a competitive four-year college. https://www.redwoods.edu/honors/
- **Veteran Resource Center** – to support and facilitate academic success for Active Duty Military, Veterans and Dependents attending CR through relational advising, mentorship, transitional assistance, and coordination of military and Veteran-specific resources. https://www.redwoods.edu/vets

Other Services (a partial list of what's available for students at CR's Eureka campus)

OTHER SERVICES FOR CR STUDENTS

- **Child Development Center** (CDC) -- subsidized childcare for eligible, low income families. Private-pay childcare may be available if space allows. https://www.redwoods.edu/cdc
- **Food Pantry / Resource Center** -- https://www.redwoods.edu/resourcecenter
- **Health Services for Students** – Free Flu Shots (while they last). Health care available at little or no cost at the Student Health Center during open hours. PE building 114. 476-4149. Closed Holidays and Breaks. https://www.redwoods.edu/studenthealth
- **Multicultural and Diversity Center** – in LRC 103

- **Parking information** -- Permit is required. https://www.redwoods.edu/publicsafety/Parking
- **Scholarships** --
  - CR Scholarship office offers scholarships from dozens of courses -- all on just one application. https://www.redwoods.edu/financialaid/Scholarships
  - Outside Scholarships to apply for (a partial list) https://www.redwoods.edu/financialaid/Types-of-Aid/Scholarships/Scholarship-List

- **Security/Public Safety** -- Security Officer is on duty 24 hrs/day, 365 days/yr.
  - Can be reached from "Courtesy Phones" and call boxes located across campus.
  - Emergency Line: 476-4111 (Non-emergencies 476-4112) https://www.redwoods.edu/publicsafety

- **Technical Support**:
  - Email its@redwoods.edu at any time and get a response within one business day.
  - Phone (707) 476-4160 or 800-641-0400, ext. 4160 (8am-4pm Mon-Fri).

ADDITIONAL BENEFITS TO CR STUDENTS

- Art Gallery -- Admission is Free during open hours. https://www.redwoods.edu/artgallery

- Bus Pass -- There will be bus passes in the Bookstore that CR Students can purchase at 50% off (31-day pass). EOPS will provide them for students in that program.

- Humboldt Botanical Gardens -- Open Wed-Sun. The gate is kept closed to keep deer out; during open hours, walk in and be sure to close the gate. http://www.hbgf.org/visit

- Preferred Name in Canvas: Students now have the option of having an alternate first name appear in Canvas. Use this form from the Admissions website https://www.redwoods.edu/Portals/28/Forms/Student%20Information%20Update%20form.pdf?ver=2016-08-30-140231-443 . Social Security card is ONLY required for official name change – Not required for Canvas "preferred name" change.

- Workshops – such as Financial Literacy, Support Groups – check CR Events list https://www.redwoods.edu/events

Math 15 Elementary Statistics

The following information is organized in these sections:

1. **About Learning Statistics**
2. **Materials you will need**
3. **Important Semester Dates**
4. **Course Content: Learning Units —** *What material will we cover?*
5. **ASSIGNMENTS —** What exactly do you have to do?
6. **Homework —** *What, When, Why, How*
7. **Creating Your Own Personal STATISTICS REFERENCE BOOK**
8. **Sources of Math Help**
9. **Course Grading**

1. About Learning Statistics

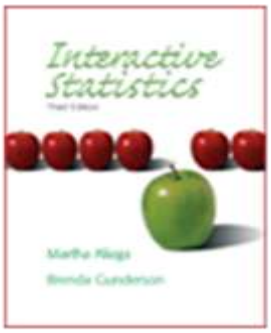
To learn statistics, you must learn a lot of new terminology (including "old" vocabulary with new meanings), special symbols, formulas, relationships, and concepts. And that's not all! You also must learn how and when to apply which formulas, and how to interpret statistical results. It isn't enough to know how to do algebraic manipulations, or how to find things on your calculator. You will need to learn which are correct formulas (or statistical tests), that are appropriate for a given situation. Also, unlike the majority of your previous math experience, there often is not just one "right" answer. You will need to understand assumptions behind different answers and how to assess which answer you feel is best.

Sometimes students feel like the whole class is full of word problems and sometimes even students with excellent algebraic skills struggle with statistical concepts and interpretations.
On the other hand, some people who have had bad prior experiences with math classes really enjoy the way statistics is much more real and meaningful and applicable to the real world.

You will need to learn (a la Bloom):

- Knowledge
    - Definitions
    - Types of Graphs
    - Different Formulas
- Comprehension
    - How related things compare (similarities, differences)
    - How to interpret summary information
    - How to make inferences/predictions based on limited information
- Application
    - How to apply what you know to new situations
    - How to make use of information (statistics or data, for instance)
    - How to solve problems, using what you have learned
- Analysis
    - How to make inferences from analysis of complex information
    - Recognizing importance and significance of component parts
- Synthesis
    - How to understand a situation and pull together all that you have learned, to construct an appropriate statistical test and make valid conclusions and inferences
- Evaluation
    - Look back and assess what was done (by you or others) to compare and evaluate results

2. Materials you will need



YOU WILL NEED TO HAVE

- **Required Text**: *Interactive Statistics*, 3rd Edition, by Aliaga & Gunderson. Published by Prentice Hall. 2006.

- **Graphing Calculator**: A TI-83 or TI-84 graphing calculator is required. A limited number are available **for rent** from the Math Lab in the ASC.

- **Bound Notebook with Grid Paper**: Something like Roaring Spring #77475 or Ampad #26-251 (about $2 - $6), for example. It should be **bound** and have **graph paper** in it. You will use this throughout the course to build yourself a reference book.

ALSO:

- **Supplemental Handouts**. There will be a lot of supplementary material. It is your responsibility to make sure that you get and read all supplemental material.

- **Time. Lots!!** In your own weekly schedule it is strongly recommended that you have blocked out 12 to 15 hours *per week* to devote to this class. The book is 15 chapters in about 1000 pages!

- **Paper**: Homework Paper and scratch paper, lots of it! It is fine with me if you RE-USE paper. Paper that's only been used on one side is still fine (in general) on the other side. You will also need some graph paper. Get it in a pad or a package of loose-leaf sheets (rather than stuck in a notebook), or print it from the web. Many people find it helpful to get graph paper with heavier lines on every fifth line to make counting easier.

- **Pencils**: Lots. Math problems should be done in pencil in this class (as in math classes in general). If you like softer lead (I find it writes darker easier) then you might like "2B" mechanical pencil lead (I prefer “2B” to "HB" which I find not as easy to work with).

- **Erasers**: At least one.

- **A ruler**: Important for drawing tables and graphs carefully and correctly.

- **Online Access** for:
  - **Email:** I expect you to have access to a computer and I expect to be able to contact you easily. The College uses your "*mycr.redwoods.edu*" email address to communicate with you so it is important that you receive those email messages anyway. Note that you can set it up to autoforward those emails to another email address if you prefer. Instructions for autoforwarding are available online.
  - **Canvas course management system**. Our "home base" for course materials will be Canvas. (This is separate from your email but you need regular access to this also.)
  - **Other online resources**. We will have other resources online too.

3. Important Semester Dates

Class meets MWF 10:05am-11:20am, starting August 20, 2018, and runs 15 weeks, followed by Finals Week. Class meets in person in room SC208 on the Eureka campus.

Important dates for Fall 2018:

- Monday, August 20 - First day of class
- Friday, Aug. 31 - Last Day to drop without a "W" on your transcript and receive a refund
- Monday, Sep. 3 – Labor Day HOLIDAY. No Classes. Campus will be CLOSED.
- Friday, Oct. 19 - Science Night at CR, 5-9pm (*Attendance is not required, but you'll enjoy it!*)
- Thursday, Oct. 25 - Last Day to petition to graduate / receive certificate this semester
- Friday, Nov. 2 - Last Day for Student-Initiated Withdrawal (no refund, and get a "W")
- Monday, Nov. 12 - Holiday for Veterans Day. No classes (campus will be closed)
- Monday-Friday, Nov. 19-23 Fall Break - No Classes (Campus closed on Thursday-Friday)
- Friday, Dec. 7 - Last regular class session
- Finals Week: December 10-14.
    - Math 15 Comprehensive Final Exam 10:45am-12:45pm on Wednesday, Dec. 12
- Friday, Dec. 14 - Last day to submit any late work.

4. Course Content: Learning Units — *What material will we cover?*

The course material is organized into five Learning Units. Each Unit includes three Chapters.
At the end of each Unit, there will be a Unit Exam and a grade update.

Unit	Chapter Titles, pages, tentative exam dates
1	Chapter 1: How to Make Decisions with Statistics (pp 1-52, 62-66) Chapter 4: Summarizing Data Graphically (pp 211-284) Chapter 5: Summarizing Data Numerically (pp 299-333, 344-5) Unit 1 Exam: Friday Sept 14
2	Chapter 6: Using Models to Make Decisions (pp 357-397) Chapter 7: Probability (pp 409-439, 454-470, 478-489) Chapter 2: Sampling Designs (pp 83-135) Unit 2 Exam: Monday Oct 1
3	Chapter 8: Sampling Distributions (pp 499-545, 555-7) Chapter 9: Making Decisions About Population Proportions (pp 563-594, 602-7) Chapter 10: Making Decisions About Population Means (pp 613-33, 639-53, 657-8) Unit 3 Exam: Wednesday Oct 17
4	Chapter 3: Observational Studies & Experiments (pp 145-196) Chapter 11: Comparing Two Treatments (pp 669-727) Chapter 12: Comparing Many Treatments (pp 743-761, 791-3) Unit 4 Exam: Friday Nov 2
5	Chapter 13: Regression Analysis (pp 807-901) Chapter 14: Analysis of Count Data (pp 921-966) Chapter 15: Nonparametric Statistics (pp 977-1002) Unit 5 Exam: Friday Nov 30

5. ASSIGNMENTS — *What exactly do you have to do?*

The course material is organized into five Learning Units. Each Unit includes more than one Chapter. At the end of each Unit, there will be a Unit Exam.

1. **In-Class Participation** — It is extremely important that you attend each and every class session and participate and keep up. We cover 15 chapters in about 40 classes and it's nearly 1000 pages! That's about 25 pages per day class session, on average. ***If you miss more than four class sessions, you may be dropped from the course***.

2. **Textbook Assignments**

   - **Reading** — Read instructions for each Learning Unit carefully — This will tell you which pages to read. This class covers a LOT of information; it is extremely important that you keep up. There will be a few parts of the textbook that we will skip, but we will cover nearly 75 to 100 pages each week.

   - **Homework Exercises** — Read instructions for each assignment carefully — This will tell you which problems are assigned. Doing homework exercises is an important part of the process by which you learn the material. It is recommended that you also work through the examples as you read, and work additional problems besides those assigned. Try to finish the homework before the next class, but if you have questions, you will be allowed to turn in your homework the following class meeting. Homework exercises will be designated in three categories: "Practice Problems" and then "Basic" and "Advanced." Everyone is expected to do all the "Practice Problems" and turn them in. To pass the class, you must do most "Basic" problems but you only need to do "Advanced" problems if you want a grade higher than C.

3. **Statistics Reference Book** — You will be constructing your own personal "Statistics Reference Book" throughout the course (see "Bound Notebook with Grid Paper" under "Materials you will need"). Follow the separate instructions. There will be some specific directions prescribing some of the contents, and you will also have freedom to include other pertinent information, definitions, examples, notes, that you think will be helpful for you as reference material. ***Create a Reference Book that helps You!***

4. **Quizzes and Exams**
   - **Short Quizzes** — We will have short quizzes often. Some will be online and some will be in class. These quizzes are important for letting us know how you are doing and what needs further work (important for both you and me to know). Some will be "Reference Book Quizzes" – ones where you will be allowed to use your Reference Book (but NOT your text or other notes) to help you with the quiz.
   - **Unit Exams** — There will be five Unit Exams, each of which will focus on the material from that Unit. Most of the Unit Exams will be given in class; at least one will be take-home.
   - **Final Exam** — The Final Exam will be comprehensive and will be given in a two-hour timeblock during finals week on Wednesday Dec. 12, 10:45-12:45 (Note that this is different from our usual class time).

5. **Data Projects** — There will be several short assignments for you to do that involve analyzing data, and turning in written assignments. Details will be provided separately.

6. **Other Assignments** — Other assignments will pertain to reading statistical results in newspaper or magazine articles and interpreting them, or analyzing data given to you, and asking you to think critically. One of the main goals of this course is for you to learn to think critically and analyze statistical claims on a more statistically-literate level, so we will practice doing that throughout the course.

6. Homework — *What, When, Why, How?*

There will be homework assignments associated with essentially each class meeting. In general, work to finish your homework before the next class meeting, but if you have questions, you will be allowed to turn in your homework two classes after it is assigned. Since this could result in overlaps of assignments, you must be very careful to keep your assignments labeled clearly, but this system allows you to ask for help, if needed, so that you can then finish up that assignment and still turn it in – and understand it.

The purpose of having you do homework exercises is

(1) to give you practice with a variety of problems, and

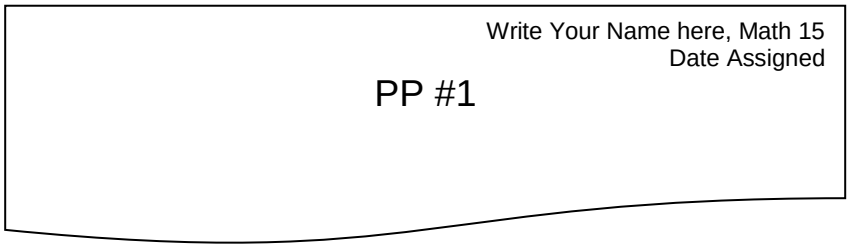
(2) to help you to learn to write responses correctly, and

(3) to help you get some feedback and check comprehension as you go.

I will often assign problems that have answers in the back of the book so that you can check your work as you go along and get help when you need to. Generally, we will be able to discuss a few problems in class, but if you still have more questions, then please be sure to seek out help, outside of class time.

There will be three types of assignments: "Practice Problems" (PP), "Basic," and "Advanced." You must do the Practice Problems and "Basic" problems to pass the class, but you only need to do "Advanced" problems if you want a grade of B- or higher. (See grading information sheet.)

Here are some very general instructions for how I want you to do your homework:



1. When you turn in your homework, if there are multiple pages, please make sure they are in the correct order. Also do not run problems into each other – each problem should be clearly marked and easy to find.
2. Label each homework assignment clearly in the **center at the top** with the assignment number, such as "**PP #1**" (Practice Problems) or "**Basic #1**" or whatever *number* it is.
3. At the top right side of the page, write **your name** and "**Math 15**" and the **date**.
4. Please **use pencil**, and erase carefully, when necessary.
5. Label problems clearly.
   - Label "Practice Problems" and do them all together on the same page(s). These are for practice and it's ok if they look like "scratch" work, but number each problem clearly. For "Practice Problems," it's ok to just turn in the answers, if no written work is needed.
   - Label "Written" problems (Basic and Advanced) and turn them in separately from Practice Problems. For these, ***paraphrase the question*** – you do not need to copy all the words of the question exactly as in the book, but you should write enough so that anyone looking at it (who does not have the book in front of them) can tell what it was that you were supposed to do. Show your work – ***do not just turn in a list of answers***.
6. Work down the page (two columns is OK) – Each problem should be below the previous (**not** next to it).
7. **Check all your answers in the back of the book before** turning it in. It is your responsibility to check your work and get help if and when you have questions.

7. Creating Your Own Personal STATISTICS REFERENCE BOOK

During the course, you will create your own personal Statistics Reference Book. In your Reference Book, you should write definitions, examples, and instructions of things that you learn in this class. The idea is for you to make your own book that will be useful to you throughout this course, and especially in courses you take after this one!

You will be allowed to use your Reference Book on our "Reference Book Quizzes" as well as when you are studying and working on your homework, of course, and on part of the Final Exam.

- **Get a bound notebook with grid paper** in it (sometimes called "quad ruled"). Composition books are about $2 to $4 dollars and are sold at the CR bookstore, Staples, and other places.
- **Make a Title Page**. Make the ***first*** page into a title page (use a right-side page). Create a title for your book, and include identifying information so it could be returned to you if you ever lose it.
- **Start the Table of Contents**. On the top of the next page (***right*** side) write "Table of Contents" and reserve *the next several pages* for your Table of Contents to grow into. Skip at least 4 pages – more if your writing is large or if you anticipate entering particularly detailed information in your "T O C."
- **Page 1**. The first page (right side) that you write actual content on should be numbered "1".
- **Number the following pages**. Number the pages, either odd and even on front and back, or you might prefer to number just the right-side pages 1, 2, 3, and so on, leaving the left sides blank.
- **Enter information regularly as you study and do your homework**. Keep one topic on each page, even if you don't fill up every page. The important thing to remember is to make this useful for yourself, so that a year from now (for example), you will be able to find whatever you look for.
- As you add information, write corresponding entries in the T O C, listing the number of the corresponding page ***in your reference book*** **to the right** of the T O C entry.
- **What to write**: At times, I will direct you to include specific information in your Reference Book. Also, as you study, go over your class notes and read corresponding material in the text, synthesize important information and put it into your Reference Book. Definitions and explanations ***in your own words*** will be easier for you to understand later. Include examples and diagrams/sketches.

Your Reference Book will be graded several times during the term. Correctness will be spot-checked (due to lack of time – not for lack of interest!). The Reference Books are graded on three areas: completeness, general correctness, and presentation.

To get an "A-" or "A" your Statistics Reference Book must have the following:

- Title Page, Table of Contents, excellent up-to-date definitions of terms from each Learning Unit, accompanied by graphs and examples, with appropriate use of color

For a B/B-/B+

- Title Page, Table of Contents, and (more than minimal) definitions of terms from each Learning Unit, with examples

For a C/C-/C+

- Title Page, Table of Contents, and at least minimal definitions of basic terms from each Learning Unit

For a D

- a Statistics Reference Book

If you have no Statistics Reference Book, your grade is an F

8. Sources of Math Help

If you have questions, please get help! It is your responsibility to seek help if you need it. I will answer some questions in class, but unfortunately, we will not have enough time to answer all of everyone's questions. Some sources of help are:

- **Courses you can sign up for to get academic support:**
    - **Math 15L: Math Tutoring Lab** (strongly recommended but not required). Register for the 1-unit or ½-unit section for this opportunity for drop-in tutoring in the Math Lab during open hours. Math Lab is a class; register for it using WebAdvisor; it is Credit/No Credit. For 1 unit of "credit" you must have 45 hours of documented attendance by the end of the semester (22.5 hours for 1/2-unit). You can sign up for ½ -unit and change to 1-unit later if you choose to.
    - **Math 252: Non-credit alternate version of Math Tutoring Lab.** You get the same drop-in tutoring help as Math 15, with the same hours, but this is -0- units and there is no hours requirement.
    - **CIS 210**: A free drop-in class for help with computers, Canvas, email, Excel, and lots more!
    - **GUID classes**: Many GUID classes can be taken by any students (even if not in DSPS program)
    - **Math Review Courses: Math 301, Math 302, Math 303** – short, 9 hours of class time total
- **People**
    - **One-on-one Tutoring in ASC**: Any CR student can sign up to meet with a tutor, by appointment (in a variety of disciplines, not just mathematics). Sign up in the Academic Support Center (ASC).
    - **Tutors** available for students in special programs (for example DSPS, EOPS, TRiO)
    - **Private tutors**
    - **Classmates – form study groups**. You can contact classmates via discussion forums or email, from the Study Buddy List, or meet together in the Math Lab.
    - **Instructors** (me and others!): You can come to my office during office hours, or by appointment; you can call or email me to connect. Other instructors are always willing to help, too, when available.

9. Course Grading (*subject to change with fair notice*)

NOTE: The "Gradebook" in Canvas is NOT your official grade and is for informational purposes only.

For the grade options at left, you must meet all the requirements in that row of the chart.

	In-class Work*	Data Projects	Reference Book	Homework**	Exams/Quizzes
For A-/A	At least 90% completed satisfactorily	At least 90% average	Excellent Reference Book, with all or most topics covered, with corresponding table of contents	• Do all Practice Problems • at least 90% of "Basic" problems completed in a legible, satisfactory way; • good work done on majority of "Advanced" problems	At least 85% average
For B-/B/B+	At least 80% completed satisfactorily	At least 80% average	Good Reference Book, covering majority of course content with corresponding table of contents	• Do all Practice Problems • at least 80% of "Basic" problems completed in a legible, satisfactory way; • good work done on at least some "Advanced" problems	At least 75% average
For C-/C/C+	At least 70% completed satisfactorily	At least 70% average	Basic Reference Book has basic topics covered	• Do 70% of Practice Problems • at least 70% of "Basic" problems completed in a legible, satisfactory way	At least 65% average
For D	At least 60% completed satisfactorily	At least 60% average	Reference Book must have at least one page of content	• Do majority of Practice Problems • Majority of "Basic" problems completed in a legible, satisfactory way	At least 50% average

For determination of +/- course grades, the entire class spread will be considered at the end of the term.

*regarding in-class work, exceptions are allowed if make-up arrangements are made in advance

** Homework includes problems from the textbook, along with other handouts and assignments.

CAVEAT: The above procedures are subject to change.