

Online Math 160 Elementary Statistics

Syllabus Spring 2012 Sections 5468 and 5478 B. Elliott

Dear Elementary Statistics Student-

Welcome to your online math class! I'm looking forward to getting to know each of you throughout the duration of your class. Please be sure the school is updated with your current information (current email address, current name, etc.). If the class materials are open and ready to go, please feel free to begin working in the class materials even before the 1st day of class.

There are a few things that I would like to make sure are clear to everyone. While your class materials (including e-book) are online and your instruction is delivered online, **you must come in-person to complete your final exam**. The final exam is the only paper-and-pencil test you will be taking on campus. Since most students taking this class live locally, most of you will make arrangements with me to take the final exam during one of the 2 hour time blocks final exam week. (If you don't live locally, or it is not possible for you to take the final exam on May 21st(12pm-2pm) or May 23rd(11am-1pm) you *may* be able to arrange alternate proctoring accommodations in your local area. You would need to work with me to find yourself an approved alternate proctoring center/arrangement near you. You will need to arrange this by the end of the 2nd week of class(February 3rd) so that the instructor(that would be me) will have time to investigate your proposed proctor and either approve or deny your request. **ALL OTHER STUDENTS MUST LET ME KNOW WHAT DAY THEY WILL BE TAKING THE FINAL EXAM** (May 21st(12pm-2pm) or May 23rd(11am-1pm)) when they submit Lab 0(due January 30)

****Students must be very self-motivated and self-disciplined to succeed in this class. Success in this class depends on your ability to read and follow the written directions in this syllabus, in the announcements posted in your online class materials (by me or by the publisher), and in the emails I send you. You should NOT take this class if you do not have 3-4 hours a day, 6 days a week to dedicate to this class. Taking this class is like having a part-time job and needs to be treated as such.** This class requires a high level of reading comprehension ability.

This class has a required online orientation which **MUST BE COMPLETED** by the end of the night on the first day of instruction (or within 24 hours of adding the class with Admissions and Records if you enroll after the first day of instruction). **Please note that part of your mandatory orientation requires you to complete some work in your required online materials (MyStatLab/Course Compass). So, you will not be able to complete the orientation without purchasing your required online materials.** If you are not able to purchase the required class materials right now, but you **will** be able to afford purchasing them before the end of Week 1, please read about the 17-day [Temporary Access](#) offered by the publisher.

While I can help you with any content related questions or class procedure related questions, technical questions (related to your computer) need to be sent to MyMathab Technical Support. You can contact Tech Support either via the 'Help & Support' link in your online class materials (top-right) or by phone at 1-800-677- 6337. If you encounter technical difficulties which you cannot solve immediately (or within 24-hours if there are no assignments due that day), you need to plan to come to campus and use the computers in the STEM center. All Homework, Quizzes and Tests in this class count towards your grade – none are dropped. Although the bulk of your learning can take place individually through your online materials, please do not hesitate to post to the discussion board and ask me if you have questions. You are also encouraged to work or study with other students in the class; students generally do much better when they do not work alone. In addition to all of this help, you are encouraged to come in to the STEM center to get in-person help if you think your question might be difficult to ask online or to understand the solution online. (619 660-4306)

Best of luck in this class!
- Bryan Elliott

Instructor Information

Name:

Bryan Elliott

Contacting me:

- **Discussion Boards:** Please post content/procedural questions here. This is where almost all questions should go so everyone hears the questions and the answers.
- **Office Hours:**
MW 6:45 am -7:30 am and 12:30 pm – 1:00 pm
W 1:00 pm – 1:30 pm
Online office hours TBA
Room H-112

I will sometimes be in my office on Tuesday or Thursday. So, if you have a question, please feel free to stop by. I am also available by appointment.

- **Email:** bryan.elliott@gcccd.edu

Please use email to send me personal information (e.g. you're sick, you were in a car accident, you missed a Quiz and want to use your one allowed late Quiz retake opportunity, etc.) Please use the class Discussion Boards to ask content (e.g. How do you solve..?) or procedural questions (e.g. What do I do if I miss a deadline?). Also, please let me know if/when you find typos, broken links, etc.

Expectations of Me:

In this class (especially in the Discussion Boards) I will not behave as the 'Sage on the Stage'. I am here to be a *learning facilitator* for you all. I will be more like the 'Guide on the Side'. We're all here to work together with each other and learn together from each other.

I may not reply to every Discussion Board posting since you and your classmates all have talents, opinions and experiences to bring to the class. I want you all to learn to work together and learn from each other. If I see that several of you are asking the same question, and no one else seems to know the answer, I may respond, give a hint or clarify.

I strive to make this course as interesting and interactive as I can.

Response Time:

I am generally online in the class materials off and on throughout the day/evening M-Th.

Fridays I usually have meetings or other events throughout the day, but I try to check into the class materials if I can.

On the weekends I try to leave work "at the office".

Thus, responses from me should be in about 24-48 hours M-Th or about 48-72 hours over the weekend while class is in session.

My Expectations of You in this Class

You will adhere to all of the requirements in the course.

You have read the orientation.

You have read the Syllabus and continue to refer to it on a regular basis (every day, or every other day at the least).

You will check the MyStatLab Discussion Boards and Announcements on a daily basis.

You have talents, thoughts, and ideas that you will share with the class.

You will 'play nicely' with others in the class.

You will not expect this class to work in the same way that a lecture class works.
You will work on this class a minimum of 3-4 hours per day 6 days a week.
You will seek help as soon as you get stuck or have a question.

General Expectations of Online Students

Online classes give students greater freedom of scheduling, but they can require more self-discipline and self-reliance than traditional on-site classes.

Please understand that it is impossible for me to be online 24/7. Anticipate waiting 24-48 hours for a response to your posting (longer over weekends and holidays). Please remember that I can't read minds, so if you have a question about the class it's your responsibility to seek assistance promptly. Keep in mind that I do not evaluate excuses; I only evaluate coursework that is submitted on time. Waiting until the last minute to seek assistance severely limits the kind of help I and others can provide. Waiting for my response does **not** excuse you from completing the assignments.

Online classes require that students have a basic computer skill level.

Students should be comfortable with using a computer, the web (at least 2 different browsers) and Discussion Boards. Instructors **do not** provide remedial "How-To-Use-A-Computer" or "How to Get your Computer Set Up to Work with MSL" directions in addition to the intended course content. If you have computer/browser problems, you need to call MSL Technical Support immediately

In terms of time requirements, they can be quite extensive with a 3-unit online class.

Please do NOT take this class if you think it will be easier than a traditional, on-site class.

Math 160 is a three-unit intensive transfer-level mathematics class.

The class is very challenging when taken in a traditional setting, and can be much more demanding when taken online. You'll need to stay focused, take charge of your learning, and work extremely hard to do well.

Students who tend to do well in online courses are those who are:

Spending at least 2-3 hours each day 6 days per week working in the class

Experienced college students (i.e. this is not the first college class ever taken)

Self-motivated learners who do not need prompting in order to complete assignments

Committed to learning, and who always make a strong effort to do their absolute best

Actively involved in taking responsibility for their own education

Are able and willing to help other students in the class (via Discussion Boards)

Ask for help from peers (via Discussion Boards) as soon as they encounter difficulty that they are genuinely not able to resolve

Good managers of time and who are able to balance personal responsibilities with class requirements

Able to understand and follow **written** instructions

Good communicators who are able to express their thoughts and communicate their ideas as well as problems with other students in the class

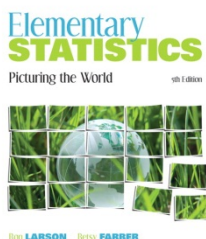
Computer literate and able to learn new software and technology quickly if necessary.

Traditional student expectations apply as well (for example: no plagiarizing, respect for classmates and instructor, etc.). You may wish to review [Cuyamaca College's Catalog](#), specifically the section on "[Academic Policies and Procedures](#)." You will be expected to know and follow those policies and procedures at all times.

Important Dates

1st day of Instruction	Late Add Deadline	Deadline to drop class with no record & receive refund	Deadline to file for Pass/No Pass grading option	Deadline to drop with a "W" grade (withdraw)
1/28	2/3	2/3	2/24	4/20

Required Materials



Textbook

1. Access to the online MyStatLab materials

Course ID Codes:

Section Number	Course ID code
5468	elliott20353
5478	elliott77767

These will be valid beginning around January 16th
 The Course ID Code for your class is UNIQUE and is needed to direct MSL to our class.

*****IF YOU SIGN UP IN THE WRONG SECTION, YOU WILL BE DROPPED FROM YOUR CLASS***

Elementary Statistics: Picturing the World, 5/E Larson & Farber |Prentice Hall |

Package ISBN-10: 0321759982 | ISBN-13: 9780321759986

This package includes MyStatLab Student access card

Please DO NOT purchase a used access code. Access codes can only be used once!
PLEASE PURCHASE THE MYSTATLAB/MYMATHLAB ACCESS CODE!! MathXL access code will NOT provide you with access to the course materials.

You can purchase the required access **directly from the publisher** (cheaper than from the bookstore)

Any information given here may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see [Academic Policies](#) stated in the catalogue.

at: <http://pearsonmylab.com/students/register/> (If you purchase directly from the publisher, your access to the class materials will be immediate and you will be able to work in the materials immediately. You will need a credit card or PayPal to do this.)

Or

You can purchase the required access from the **Cuyamaca bookstore** in-person or online at: [Cuyamaca College Online Bookstore](#) (If you purchase your access from the CC online bookstore, you may have to wait several days to get the access packet. You may have to wait to begin working in the class materials. If you do not have access to a credit card or PayPal, you will need to purchase in-person from the on-site bookstore since they do take cash and checks.)

Registration into the MyStatLab online materials will be needed in order to complete your mandatory orientation which is due by the end of the day on the 1st day of classes. Failure to purchase, register and complete work in the required online materials will result in being dropped from the class.

More information about the MyStatLab online materials can be found at <http://pearsonmylab.com/>.

(If you cannot afford to purchase the class materials today, but you will be able to pay within a week or two, please read about the [17-day Temporary Access](#) offered by the publisher. This Grace Period allows you to get into the online class materials today, but pay for them within a week. Also, if you purchase access from the bookstore and they are out of stock, you may need to take advantage of the Temporary Access to get into the class materials before your paid access from the bookstore arrives.)

It is NOT required that you have your own computer at home for this class. All of the computers in the STEM center at Cuyamaca College are configured to work with MyStatLab.

Occasionally, the MyStatLab website/server has problems. If that happens, you can generally still access portions of the class materials (homework, quizzes, class announcements, study plan, calendar, assignment dashboard, and grade book) by logging in at this 'backdoor login': http://www.mathxl.com/login_mml.htm (please bookmark this page in case of emergency)

2. Graphing Calculator

I will be using and doing demonstrations on a [Texas Instruments](#) TI-84 graphing calculator.

However, the TI-83/84 (any version) also works almost exactly the same. Please purchase/borrow either a TI-83 (any version) or TI-84 (any version).

If you choose to use a different graphing calculator, you may not be able to get help with it.

Most of your lab assignments will **REQUIRE** the use of a TI-83/84 calculator. If you do not have one by the end of the second week of class you will more than likely FAIL the class.

3. A notebook for note taking and working problems

You should treat this class as you would any other math class. Take notes in a notebook while watching lecture videos or while reading the eBook, work practice or homework problems in your notebook before submitting answers, etc. I don't usually check your math notebook. However, I may ask to see it (via fax or .pdf) if you begin to fall behind or start consistently scoring low on Quizzes or Tests.

THIS CLASS DOES NOT REQUIRE A HARDCOPY TEXTBOOK. Your required online class materials (MSL) contain the eBook for the class. If you do not like to read eBooks (or if you want a hardcopy of the eBook to read at the beach or elsewhere), you might choose to purchase a hardcopy of the textbook. To save money, you could even purchase an older version of the hardcopy book and match the content to your eBook. Whether or not you choose to purchase a hardcopy book, you still need to purchase MSL as it contains all of your homework and Quizzes.

ACCOMMODATIONS: A student with a verified disability may be entitled to appropriate academic accommodations. Please contact the instructor and/or the Disabled Students Program and Services Office [DSP&S](#) for further information.

Participation Requirements

1. **On Campus Attendance for Final Exam** - You must come, in-person to take the final exam. The time blocks and days I have set aside are as follows: May 21st(12pm-2pm) or May 23rd(11am-1pm). Since most students taking this class live locally, most of you will take your paper-and-pencil tests at Cuyamaca College. Students not able to make it to Cuyamaca College for the Final Exam will need to make prearrangements to take your Final Exam elsewhere (as discussed on the 1st page of the syllabus). You **MUST** choose which time/day block you will be using on your Lab 0 assignment which is due no later than January 30.

Your learning, practicing, homework, and Quizzes can be done from off-campus if you choose. Regardless of what computer you use to do homework, learning, practicing, and Quizzes, you **should be working in this class a minimum of 12-16 hours per week**. If you earned a B or a C in Intermediate Algebra or if it's been a number of semesters since you took the prerequisite class, you need to plan to spend about **twice the minimum** amount of time. If your algebra skills are rusty/weak you will have to work extra to catch up and to keep up.

2. **Orientation** - All students must complete an orientation. The mandatory orientation consists of two (2) parts and can be completed either on your home computer or in the MLC.

Please begin the orientation at: <http://www.cuyamaca.edu/bryan.elliott>

- **Part I** of the orientation requires no financial commitment to the class and can be read and followed by any interested party.
- **Part II** of the orientation is located in MyStatLab and requires you to purchase and work in the required online materials. Once you complete the last item in your orientation, your first homework assignment will open up and you can begin the class work.

Your orientation due date is based on when you enrolled (with Admissions and Records) into the class.

If You Enrolled on or Before the First Day of Instruction for Your Class

Students enrolling on or before the first day of instruction must complete the online orientation no later than 11:59 pm on the 1st day of Instruction.

If You Enrolled After the First Day of Instruction for Your Class

Students enrolling after the first day of instruction must complete the online orientation within 24 hours of adding the class with Admissions and Records.

If you do not complete all portions of the orientation by the end of the 1st day of classes, you will be dropped for non-attendance.

Instructor Drop Policy

Students may be dropped for not completing the mandatory online orientation by the above due date.

At the *instructor's discretion*, students *may* be dropped (up until the last day to drop the class) for non-attendance as described below:

- ❖ **Missing two different Quizzes or Tests**
- ❖ **Doing no Homework/Quizzes in online materials for a week** (unless you are so far ahead that you have no Homework/Quizzes marked as past due)

Students are responsible for dropping themselves from this class . Do NOT rely on me to drop you if you no longer wish to be in the class.

Note: If you miss a Quiz, Test or the Final you will automatically receive a zero on it and that 0 will be averaged into your grade in the class.

Academic Integrity

Academic integrity will be expected from all. Any breach will be dealt with by a zero on the assignment (which can not be made up) or by failing the class. You may wish to review [Cuyamaca College's Catalog](#), specifically the section on "Academic Honesty/Dishonesty." You will be expected to know and follow those tenets as well.

Steps for completing the assignments

Important! Please read and follow the steps below.

Step 1 Read the Textbook & the Lecture Notes

Log onto MyStatLab – click on Chapter Contents - and then select the chapter. After reading the chapter, click on Chapter Quiz. Check your understanding of the material by answering the questions. Click on the video icon to see the solutions.

Click on Multimedia Library to select PowerPoint Lecture Slides or video lectures. After listening to (or reading) the lecture, click on Study Plan. Check your understanding of the material by answering these questions. Study Plan questions are not graded.

You will find the student **solutions manual** under Chapter Contents. This manual shows solutions to the odd exercise questions and the TryItYourself questions in the textbook.

Step 2 Work on the Lab Assignment

Use the TI-83 (or 84) and/or StatCrunch to do lab assignments. Try the lab assignments **before** working on the HW or quizzes. This will teach you how to use the TI-83/84 for that chapter. Consult the TI-83/84 manual.

[MyStatLab – Lab Assignments – click TI manual]

Step 3 Do the Homework

The homework questions are just like the exercise questions in the textbook. You can see the matching exercise question number by placing your mouse on the homework questions. Work on these questions **after steps 1 & 2 above**. You can rework the HW problems that are marked incorrect. You do not have to complete all HW questions in one sitting.

[MyStatLab – Homework]

Step 4 Take the Quiz

Take the chapter quiz **after** working on the Homework. You have **60 minutes** per quiz and two chances to take each quiz. Stay on the quiz screen while taking the quiz. Do **not** minimize the screen or exit the screen before completing it. Make sure to click on the 'Submit' button after answering all the questions. You cannot leave and come back to resume the quiz. Answer them all at one sitting.

Step 5 Take the Test

Take a test after completing two chapters. There are **five tests** including the final exam.

The **final exam is comprehensive**. You have 75 minutes for each test with only one chance and 120 minutes for the final exam. Stay on the test screen while taking tests. Do not minimize the screen or exit the screen before completing it. Make sure to click on the 'Submit' button after answering all the questions. You cannot leave and come back to resume tests. You need to answer them all at one sitting.

[MyStatLab – Quizzes & Tests]

Step 6 Discussion Board

Post questions you have or answers to your classmates' questions. Post your comments or findings at least 7 times throughout the semester. You can post or answer more than once, but you will get credit for one per DB week (or chapter). Extra points will be given for additional postings beyond the fifth posting.

Discussion board postings should **be in the form of a question or answer to your peer's question**. For example, "I agree", "yes", "no" or "thank you", will not be counted toward DB points.

Read other students postings before writing yours.

[MyStatLab – Discussions]

**** Check the Stats Homepage (www.cuyamaca.edu/bryan.elliott) at least once a week for updated class info. I will try to keep announcements current on your course homepage in MyStatLab****

Evaluation:

Homework	10 points per assignment
Lab	10 points each
Quizzes	20 points each
Tests	50 points each
Final Exam(read below about the final exam)	150 points
Discussion Board	3 points per DB week

Grading Scale

The grades will be calculated as the percentage of the total points possible:

A=90% - 100%, B=80% - 89%, C=70% - 79%, D=60% - 69%, F=Below 60%

Final Exam

The cumulative final exam will be given on campus. The format for the final will be part multiple choice and part show your work. You are allowed 2 sheets of **notes** (no examples) plus the pull out formula card that comes with your textbook (I will provide copies of this and all necessary tables).

Any information given here may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see Academic Policies stated in the catalogue.

Required Materials:

- ❖ VALID Picture ID
- ❖ TI-83/84 Calculator

If you are taking the final exam with me, you must request one of the times listed below: inform me of your choice by submitting Lab 0, which is due on Monday, January 30.

- May 21st(12pm-2pm)
- May 23rd(11am-1pm)

Final Exam Dates:

MONDAY, MAY 21st 12pm-2pm

WEDNESDAY, MAY 23rd, 11am-1pm

If you are unable to take the final exam at the scheduled times above, contact me via email by **Friday of week two** to schedule an alternative date (again, include "Math 160 Final Exam" in the subject line of the email).

Proctoring the Final Exam:

If you are unable to take the final at the Cuyamaca campus you will need to find a local public library, College, or local business such as Sylvan Learning Center to provide this service (and pay for the service if there is a charge).

The service must be able to:

1. Receive the final as a PDF attachment in an email from me
2. Print the final exam as formatted
3. Arrange a time so that you can complete the final on or before Tuesday, May 22nd at 11:59PM
4. Monitor you while you are taking the final
5. Scan and email the exam to me **or** send it back to me via CERTIFIED mail postmarked before 6:00PM on Wednesday, May 23rd.

I must approve your choice of a proctor. So, by **Friday of week two(February 3rd)**, you must provide me with a contact name, phone number, physical address, and email address at the proctoring service where you will take the final exam. Please send the information to me via email with "Math 160 Final Exam" in the subject line.

Making the Grade

In order to pass this class with a grade of C or higher, the student must:

- **Earn a D or better on the final exam**, and
- Have an overall grade in the class of at least 70%.

For example, if a student has an overall grade of 92% before taking the final exam, and earns an F on the final exam which drops the overall grade down to 84%, the highest grade the student could earn for the class would be a D.

Tentative Schedule (Subject to change)

Due Dates	Assignment Due
F. 1/27	Submit HW 1.1 & 1.2; Introduce yourself in DB #1
M. 1/30	Submit Lab#0; Start Lab #1
F. 2/3	Submit Lab #1 & HW 2.1- 2.3; Start Lab #2
Th. 2/9	Submit Lab #2
F. 2/10	Submit HW 2.4 & 2.5
T. 2/14	Take Quiz Ch.2; DB #2 due
M. 2/20	Start Lab #3; Submit HW 3.1
F. 2/24	Submit HW 3.2 & 3.3
T. 2/28	Submit Lab #3
W. 2/29	Submit HW 3.4
F. 3/2	Take Quiz Ch.3; DB # 3 due
M. 3/5	Test # 1(Ch.2 & Ch.3)
Th. 3/8	Start Lab # 4 ; Submit HW 4.1
T. 3/13	Submit Lab # 4 & HW 4.2
Th. 3/15	Take Quiz Ch.4; DB # 4 due
T. 3/20	Start Lab # 5 ;Submit HW 5.1 & 5.2
Th. 3/22	Submit Lab # 5
M. 3/26	Submit HW 5.3 & 5.4
W. 3/28	Take Quiz Ch.5; DB # 5 due
F. 3/30	Test # 2(Ch.4 & Ch.5)
T. 4/10	Start Lab # 6; Submit HW 6.1
F. 4/13	Submit Lab # 6, HW 6.2 & 6.3
M. 4/16	Take Quiz Ch.6; DB #6 due
Th. 4/19	Start Lab #7; Submit HW 7.1 & 7.2
T. 4/24	Submit Lab #7, HW 7.3 & 7.4
W. 4/25	Take Quiz Ch.7; DB # 7 due
F. 4/27	Test # 3(Ch. 6 & Ch.7)
W. 5/2	Submit Lab # 8
M. 5/7	Submit HW 9.1 & 9.2
T. 5/8	Take Quiz Ch.9; DB # 8 due
F. 5/11	Submit Lab #9 & HW 10.1-10.2
M. 5/14	Take Quiz Ch.10; DB # 9 due
W. 5/16	Test # 4 (Ch.9 & Ch. 10)
	Submit Final Review (Extra points, optional) ; DB #10

Any information given here may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see [Academic Policies](#) stated in the catalogue.

***** Important Notice*****

The homework, quizzes, and tests will be closed after the due date given in the tentative schedule above. However, if you want to work on the missed assignments, email me. I will open it for you. Keep in mind that you will get a point deduction per day after the due date.

You will not receive any points after the due date for postings in the Discussion Board.

Tutoring

To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services available in the STEM center in the H-building. All Supervised Tutoring sections are FREE. However, you must enroll to receive the services -- no units or grades are given.

Tutoring Service in H 102 (hours listed are accurate for Fall semester 2011, they may change in the Spring 2012)

- M – Th 9 am – 6 pm
- F 9 am -12 noon

This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see Academic Policies stated in the catalogue.

Student Learning Outcomes

Upon successful completion of the course the student will be able to:

1. Construct and interpret frequency distributions, histograms, cumulative frequency tables; stem leaf plots, box and whisker plots; use these methods to draw conclusions about the numerical data.
2. Calculate and interpret measures of central tendency including mean, mode, and median; and weighted mean, distinguish when each measure is appropriate to use.
3. Calculate and interpret quartiles and deciles and measures of variability including range, inter-quartile range, variance, standard deviation.
4. Calculate standard scores and apply the Empirical rule to bell-shaped distributions and apply Chebyshev's inequality to general distributions.
5. Define sample spaces and events for experiments; distinguish between mutually exclusive, independent and dependent events, calculate probabilities of simple, compound, and conditional events using postulates, additive and multiplicative rules.
6. Define random variables and the probability distributions they generate; describe characteristics, expected values, variance and methods for calculating probabilities for these probability distributions emphasizing the binomial, and normal probability distributions.
7. Describe the sampling distribution of sample means for both finite and infinite populations; apply the Central Limit Theorem; describe the sampling distribution of sample proportions.

8. Construct and interpret confidence intervals for population means including when population standard deviation is unknown and samples are small; determine necessary sample size to estimate means within prescribed error bounds.
9. Construct and interpret confidence intervals for population proportions, determine necessary number of independent trials to estimate proportions within prescribed error bounds.
10. Perform formal tests of hypotheses concerning single population means and single population proportions, including formulating hypotheses, choosing appropriate test statistics, calculating critical values for rejection regions, calculating probability values, reaching decisions about the hypotheses, and recognizing possible Type I or Type II errors.
11. Conduct hypothesis tests on contingency tables and perform one-way analysis of variance.
12. Describe the linear relationships between two-variable using the correlation coefficient; derive the least squares regression equation and make predictions using the regression model; perform hypotheses test for significant linear correlation; predicted y-values, slopes of regression lines and y-intercepts of regression lines.

***Any information given here may change at the discretion of the instructor at any time.