## **BRAZOSPORT COLLEGE**

## **COURSE SYLLABUS – FALL 2010**

MATH 1342 – STATISTICS

**Course # 1342.40** 

Course Schedule/Location: Tuesday 12:35 – 13:50, F-230

Instructor: Dr. Calin Agut,

Office: J-202, Department of Mathematics, Brazosport College

E-mail: Calin.Agut@brazosport.edu

**Phone**: 230-3274 **Office Hours:** (TBA) \_\_\_

Course Website: https://online.brazosport.edu

## **Course Description/Overview**

The *Statistics* course is design as an elementary course. It will apply a lot of Mathematics skills and extend the mathematical research of real life problems and situations. The course will include a study of Measures, Probability, Binomial Distribution, Estimations and many others. The MS Excel application will be used for some applications.

Credits: 3.

#### **Textbook and Resources**

The course textbook is *Elementary Statistics using Excel*, by M. F. Triola, The Pearson Addison Wesley Company, 2007. It is provided in an e-format via the account on coursecompass.com.

The student must print out the pages or the hand-outs with PDF Worksheets for class.

It is the student's responsibility to have access, to print or to use the files included in the Resources Folder, such as Tables, Formulas, etc. Some of them will be required to be used during the Labs.

## Course Online Information (BC website): https://online.brazosport.edu

Because the course is in hybrid format (49% online and 51% in class), it is extremely important to find all the information related to the course website. Please read the attached sheet with instructions and lessons' links.

It is the student's responsibility to check often the site for any discussions, comments, announcements and updates.

#### Web CourseCompass Registration/Login: www.coursecompass.com

See the attached Web Info CourseCompass Sheet with information.

#### **Required Materials:**

Access to PC: for homework, quizzes and other assessments assigned by instructor.

Key/Access code to coursecompass.com, as well as to BC online courses (D2L) via https://online.brazosport.edu.

Optional: Graphing Calculator, TI-83 or better. Sometimes in class there will be instructions on how to use it for Statistical problems. It is the student's responsibility to have basic knowledge about using his/her own calculator.

#### **Prerequisites:**

MATH 1314 or approval of the division chair. Basic skills in algebra are required. These include, but are not limited to, operations with numbers, set theory, logic and geometry. Basic skills in using PC, MS Office and Excel are required.

#### **Format**

This course is a on a hybrid format, that means we meet only once per week on campus. The student is responsible to have prepared the assigned lessons; the on campus meeting is designed for a Lab, when only applications and practice exercises will be done. No theory will be taught during the Lab time.

When sitting at the Lab, the student must be sure that s/he has appropriate access to a PC station.

#### **Assessments:**

There will be several quizzes, one Test (Midterm) and one Final Exam. Any assessment may contain exercises, problems and theoretical questions as well. Some assignments will be done online, some of them in class, unannounced.

## COURSE SYLABUS – FALL 2010

# MATH 1342 – *STATISTICS* **Course # 1342.40**

## **Grading Policy/Evaluation:**

The grades will be counted in the following way:

Quizzes	25%
Homework	15%
Test(s)	40%
Final Exam:	20%

#### **Ouizzes:**

There will be several quizzes during the term. Please consult the attached schedule. All of the quizzes are due online with coursecompass.com. Be sure you consult the schedule and don't miss any quiz. Every quiz has a time limit of 60 minutes and a maximum of 2 attempts. There will be a time frame of about 60 hours for each quiz. The number of questions may vary(10-20). No makeup is allowed.

#### Lab

When a student is attending a Lab, s/he needs to have prepared already the assigned Lessons (see the attached Schedule). Watch the videos BEFORE you come in Lab-class. The instructor will not teach the theory, nor the lesson, but guide the students for applications, examples and exercises. Most of the work will need PC's assistance, using Excel, Internet, PowerPoint, Paint, Word, etc.

Also, they may be some graded assignments, like quizzes, projects, theoretical questions, etc. The assigned homework can be done either before or after the correspondent Lab.

#### Homework

The assigned HWs are listed on the schedule. All of them are due online with coursecompass.com. There will be a due date (see Schedule). No time limit for the HW (except for the due date). Maximum number of attempts is 5 per question. The number of questions may vary. No makeup is allowed. There will be Reviews (for Test 1 and for Final) scheduled online within 1 week before the assignment. Even the Reviews are not mandatory, is required to be completed.

#### Test(s)

The Tests will be administrated in the regular class and they will be online via coursecompass.com. You'll have 1 attempt and a time limit (not passing the class meeting schedule).

The date for the Test is stated on the Schedule (see attached), as tentative; the instructor will announce the exact date and time in the class, prior. For this reason, <u>no make-up test</u> is allowed, unless extraordinary circumstances, ONLY official documented. In these conditions, the make-up must be taken within 3 days from the regular date.

#### **Final Exam**

The Final Exam is mandatory and comprehensive. It is scheduled for **Wed, December 15 2010**, in the regular classroom, from **13:00 to 15:00**. Any possible change will be announced in class and is the student's responsibility to be informed. Missing the Exam might be reflected as failure of the course.

The Exam is online, via coursecompass.com. The time limit is 120 minutes within the scheduled time for the Final. No make-up is allowed for the Final, under any circumstances.

## **Grading Scale:**

Unless an announced in changes is made, the following scale will be applied for this course:

A: 90-100; B: 80-89; C: 70-79. D: 60-69 F: < 60.

## COURSE SYLABUS – FALL 2010

## MATH 1342 – STATISTICS

## Course # 1342.40

#### **Attendance:**

The students are strongly encouraged to attend every Lab class. Each class meeting is considering as an entity. After 4 absences the instructor will consider "excessive absences" and may fail the student.

To avoid unnecessary class disruptions, the students are expected to arrive on time and remain seated until the class is dismissed. If a student is coming late in or is leaving earlier the class, the instructor may consider it as an absence.

The time spent in the class, the student will follow the instructor's directives and will respect the School's student conduct (including Academic Honesty).

## **Dropping policy**

In terms of the Brazosport College calendar, the last day to withdraw from course is November 5, 2010. No dropping will be initiated by the instructor at any time, unless extraordinary circumstances, official documented.

To be eligible for a reinstatement, the student must bring official documents and have an average of at least 70% in his/her class participation.

### **Time requirement:**

Taking into account the volume of the information and the homework assigned, a minimum of 8 hours a week outside of class is required.

#### Students with disabilities:

Please address any request to the School Staff so that we can arrange for proper accommodation. It is my policy and priority to allow equal opportunity for every student.

#### Miscellaneous

No electronic recording device is allowed in the class. The students may only take written notes from the class.

No cell phones are allowed to be used during the class, quizzes, tests or exams. Please turn off any electronic device which may disturb the class activity.

No food or drink is allowed to be brought into the class/Lab and be consumed, at any time.

No other electronic device, including laptop, palm, iPod, etc is allowed to be brought and used in class, at any time.

If the student does not comply with those requirements, an academic action may be immediately taken by the instructor (mark absent for the entire meeting, grade of 0 for the assignment, invite to leave the class, etc).

There is no initial intention for dropping any of the scheduled assignments.

#### **IMPORTANT:**

Any further information will be presented in class by the instructor and is the student's responsibility to be

Information may be provided via email (the one you use for coursecompass.com) and is recommended to be checked often, at least twice per week.

It is at the instructor's discretion to provide a Diagnostic Test at any time during the semester; this one will not be graded.

Because of the possible schedule conflict, the office hours will not be available during the Exam week unless special request by student(s).

## **Course Outcomes:**

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

- 1. Identify non-randomness in a sampling technique,
- 2. Describe the center of a data set using the measures of central tendency,
- 3. Measure the dispersion of data set using the measures of range, variance and standard deviation,
- 4. Find the probability of an event using permutations and combinations,
- 5. Apply the addition rule for finding probability,
- 6. Apply the conditional probability to compound events,
- 7. Find the probability of an event using the binomial distribution,
- 8. Calculate the mean of a discrete random variable,
- 9. Compute the expected value in an application problem,
- 10. Compute probability using the standard normal distribution,
- 11. Estimate a population mean using confidence interval,
- 12. Estimate a population variance using confidence intervals,
- 13. Construct and test a hypothesis.

#### **Academic Honesty:**

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the BC Student Guide for more information, this is available online at <a href="http://www.brazosport.edu">http://www.brazosport.edu</a>, click on the link found on the left side of the homepage.

#### Students with disabilities:

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, 979-230-3236 for further information.

## **Other student Services Information:**

Your course on WebCT: <a href="http://webster.brazosport.edu">http://webster.brazosport.edu</a>

Information about study skills and tutoring for math, reading, writing, biology, chemistry and other subjects is available in the Learning Assistance Center (LAC), see <a href="https://www.brazosport.edu/~lac">www.brazosport.edu/~lac</a> or call 979-230-3253.

The Student Services provides assistance in the following:

Counseling and Advising 979-230-3040 Financial Aid 979-230-3294 Student Activities 979-230-3355

To reach the Information Technology Department for computer, email, or other technical assistance call the Help Desk at 979-230-3266.

Statistics MATH 1342 Semester:

Fall 2010

Schedule:

Lab Tue 12:35-13:50

Room: F-230

Week	Day	Date	Lab Lesson(s)	Lessons/Book	Homework	Quizzes
	Mon	8/30/10				
	Tue	8/31/10	Introduction	N/A	Create an Account	
	Wed	9/1/10				
1	Thu	9/2/10				
	Fri	9/3/10				
	Sat	9/4/10				
	Sun	9/5/10				
	Mon	9/6/10				
	Tue	9/7/10	Lessons 1, 2, 3	1.1 - 1.5	HW 2, 3	
	Wed	9/8/10				
2	Thu	9/9/10				
	Fri	9/10/10				
	Sat	9/11/10				
	Sun	9/12/10				
	Mon	9/13/10				
	Tue	9/14/10	Lessons 4, 5	2.1 - 2.4	HW 4, 5	Quiz 1 (1-5)
	Wed	9/15/10				Tue 14:00 to
3	Thu	9/16/10				Thu 22:59
	Fri	9/17/10				
	Sat	9/18/10				
	Sun	9/19/10				
	Mon	9/20/10				
	Tue	9/21/10	Lessons 6, 7	3.1 - 3.3	HW 6, 7	
	Wed	9/22/10				
4	Thu	9/23/10				
	Fri	9/24/10				
	Sat	9/25/10				
	Sun	9/26/10				
	Mon	9/27/10				
	Tue	9/28/10	Lessons 8, 9	3.4, 3.5	HW 8, 9	Quiz 2 (6-7)
		9/29/10				Tue 14:00 to
5		9/30/10				Thu 22:59
	Fri	10/1/10				
		10/2/10				
		10/3/10				
	Mon	10/4/10				
	Tue	10/5/10	Lessons 10, 11	4.1 - 4.3, 4.6	HW 10, 11	
	Wed	10/6/10				
6	Thu	10/7/10				
	Fri	10/8/10		<u> </u>		
	Sat	10/9/10		1		
	Sun	10/10/10				
	Mon	10/11/10	10.10		100/ /2 /2	0 1 0 (0 10)
	Tue	10/12/10	Lessons 12, 13	4.4, 4.5, 4.7	HW 12, 13	Quiz 3 (8-13)
_	Wed	10/13/10		-	Review for Test	Tue 14:00 to
7	Thu	10/14/10		1	between	Thu 22:59
	Fri	10/15/10			10/11 6:00 am	
	Sat	10/16/10			to	

	Sun	10/17/10			10/19 at 12:00 pm	
	Mon	10/17/10			10/19 at 12.00 pm	
8		10/19/10	Test 1	N/A	in along anling	
	Tue		rest i	IN/A	in class, online	
	Wed	10/20/10				
°	Thu Fri					
	Sat	10/22/10				
	Sun	10/23/10				
	Mon	10/25/10	1 44 45	F 4 F 4	111/1/4/4/	0:- 4 (44 45)
	Tue	10/26/10	Lessons 14, 15	5.1 - 5.4	HW 14, 15	Quiz 4 (14, 15)
	Wed	10/27/10				Tue 14:00 to
9	Thu	10/28/10				Thu 22:59
	Fri	10/29/10				
	Sat	10/30/10				
	Sun	10/31/10				
	Mon	11/1/10	10.47	0.4.00	104/40/47	0 : 5 (40 45)
	Tue	11/2/10	Lessons 16, 17	6.1 - 6.3	HW 16, 17	Quiz 5 (16, 17)
4.0	Wed	11/3/10				Tue 14:00 to
10	Thu	11/4/10				Thu 22:59
	Fri	11/5/10				
	Sat	11/6/10				
	Sun	11/7/10				
	Mon	11/8/10	12.12		1004 40 40	2 1 2 (12 12)
	Tue	11/9/10	Lessons 18, 19	7 7.4	HW 18, 19	Quiz 6 (18,19)
	Wed	11/10/10				Tue 14:00 to
11	Thu	11/11/10				Thu 22:59
	Fri	11/12/10				
	Sat	11/13/10				
	Sun	11/14/10				
	Mon	11/15/10				2 1 7 (22 21)
	Tue	11/16/10	Lessons 20, 21	7.5, 8.1, 8.2	HW 20, 21	Quiz 7 (20, 21)
	Wed	11/17/10				Tue 14:00 to
12	Thu	11/18/10				Thu 22:59
	Fri	11/19/10				
	Sat	11/20/10				
	Sun	11/21/10				
	Mon	11/22/10				
	Tue	11/23/10	Lessons 22, 23, 24	8.3 - 8.6	HW 22, 23, 24	
	Wed	11/24/10	Thankgiving			
13	Thu	11/25/10	Thankgiving			
	Fri	11/26/10	Thankgiving			
	Sat	11/27/10		1		
	Sun	11/28/10				
	Mon	11/29/10	07.00			0 1 0 (00 00)
	Tue	11/30/10	Lessons 25, 26		D	Quiz 8 (22-26)
	Wed	12/1/10			Review for Test	Tue 14:00 to
14	Thu	12/2/10			between	Thu 22:59
	Fri	12/3/10			11/29 6:00 am	
	Sat	12/4/10			to	
	Sun	12/5/10			12/07 at 12:00 pm	
	Mon	12/6/10	T	21/4	in al	
	Tue	12/7/10	Test 2	N/A	in class, online	
	Wed	12/8/10				
15	Thu	12/9/10		l		

	Fri	12/10/10			7-Dec
	Sat	12/11/10			??????????
	Sun	12/12/10			
	Mon	12/13/10			
	Tue	12/14/10			
	Wed	12/15/10	Final Exam	13:00 - 15:00	
16	Thu	12/16/10			
	Fri	12/17/10			
	Sat	12/18/10			
	Sun	12/19/10			

On line assignments via coursecompass.com	
Homework instructions:	Quiz instructions
HW from 1 through 13	See the dates
Due by Mon, 03/08/10 at 12:00 AM	Time frame 57 hours
Unlimited time for working;	Maximum 2 attempts
Maximum 5 attempts per question	Time limit: 60 minutes
HW from 14 through 24	
Due by Mon, 04/26/10 at 12:00 AM	
Unlimited time for working;	
Maximum 5 attempts per question	

**Note:** course textbook is *Elementary Statistics using Excel*, 3<sup>rd</sup> Edition by M. F. Triola, The Pearson Addison Wesley Company, 2007.

#### STATISCTICS – MATH 1342

## **Online Login Instructions**

Please go to <a href="https://online.brazosport.edu">https://online.brazosport.edu</a> and look for the Statistics – MATH 1342 link. You'll be directed to the login procedure and be able to access all the Course Information.

Read very carefully the Front/Home Page of the Course for general information, presentation, schedule and a Welcome Message. Check it often for any further announcements and/or updates.

Explore the Course Content section (a tab on the top of the page) and find details by lesson, by weeks or by assignments.

You'll find Units that contains information and also Lessons contents.

The listed Lessons have:

- Video file, with the presentation of the lesson; Please be sure that you watched the video and followed the instructions related to the topic and schedule (check it) and be ready for the Lab.
- PowerPoint file, so the students can go through the topic of each presentation individually, at any time;
- o *PDF Worksheet*, containing proposed exercises and applications for the topic related; It is mandatory to have these printed out for the scheduled Lab;
- Excel file/worksheet (not for all lessons) with approach methods, statistical
  applications and examples related to the topic; the student can practice on it,
  explore and fix the necessary computational skills.

The Course Content will also have an Unit (Work Table) with answers to students' questions. The answers will be even in Video, PowerPoint, Excel or PDF format. If you have addressed a topic question to the instructor, then most of the answers will be shown for everybody in this folder, for any further practice or discussions.

Please feel free and address to the instructor any inquire and also any suggestion to improve the quality of the course and of the online education.

Bellow is the list with the links for every lesson:

- http://longview.brazosport.edu/cagut/c agut videos stat/lesson 1 video usingexcel. wmv
- http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_2\_Video\_IntrodStat. wmv
- 3. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_3\_Video\_Experiments.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_3\_Video\_Experiments.wmv</a>

- 4. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_4\_Video\_FreqDistr.w">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_4\_Video\_FreqDistr.w</a>
  mv
- http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_5\_Video\_StatGraphs .wmv
- 6. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_6\_Video\_MeasuresO">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_6\_Video\_MeasuresO</a> fCenter.wmv
- 7. <a href="http://longview.brazosport.edu/cagut/c agut videos stat/Lesson 7 Video MeasuresO">http://longview.brazosport.edu/cagut/c agut videos stat/Lesson 7 Video MeasuresO</a> fVar.wmv
- 8. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_8\_Video\_MeasuresO">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_8\_Video\_MeasuresO</a> fRelatStand.wmv
- 9. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_9\_Video\_EDA.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_9\_Video\_EDA.wmv</a>
- http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_10\_Video\_ProbabilF undam.wmv
- 11. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_11\_Video\_ProbabilRules.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_11\_Video\_ProbabilRules.wmv</a>
- 12. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_12\_Video\_MultilRule">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_12\_Video\_MultilRule</a>
  .wmv
- 13. <a href="http://longview.brazosport.edu/cagut/c">http://longview.brazosport.edu/cagut/c</a> agut videos stat/Lesson 13 Video CountTec h.wmv
- 14. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_14\_Video\_RandomVar.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_14\_Video\_RandomVar.wmv</a>
- 15. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_15\_Video\_BinomDistrum">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_15\_Video\_BinomDistrum</a> r.wmv
- 16. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_16\_Video\_StandNorm">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_16\_Video\_StandNormDistr.wmv</a>
- 17. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_17\_Video\_ApplicSND">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_17\_Video\_ApplicSND</a> .wmv
- 18. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_18\_Video\_EstimProportion.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_18\_Video\_EstimProportion.wmv</a>
- 19. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_19\_Video\_EstimMean.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_19\_Video\_EstimMean.wmv</a>
- 20. <a href="http://longview.brazosport.edu/caqut/c\_aqut\_videos\_stat/Lesson\_20\_Video\_EstimVariance.wmv">http://longview.brazosport.edu/caqut/c\_aqut\_videos\_stat/Lesson\_20\_Video\_EstimVariance.wmv</a>
- 21. http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_\_21\_Video.wmv
- 22. <a href="http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_22\_Video.wmv">http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_22\_Video.wmv</a>
- 23. http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_23\_Video.wmv
- 24. http://longview.brazosport.edu/cagut/c\_agut\_videos\_stat/Lesson\_24\_Video.wmv

## **STATISTICS – MATH 1342**

## Web CourseCompass Registration/Login:

Important: In order to be able to create your account via coursecompass,

you need to purchase an Access Code from College's Bookstore.

Open: Go on <u>www.coursecompass.com</u>

Register: Click on "Register" as Student;

Be sure you have: - valid email address;

- course ID is **agut10194** - a Student Access Code.

Click "Next"

Enter the course ID: agut10194 and click "Find the Course"

If you have the Access Code, click on and type it;

then proceed.

Click Next and complete the information required.

IMPORTANT: if you have any difficulties, go on www.coursecompass.com and

click on "How to register"

or "Need Help"

Login in: after having registered yourself, anytime you need to access your

account,

just go on www.coursecompass.com and click on "LOG IN".

Course: agut10194 – Statistics Summer 2010

(Be sure you are log in for this course)

Please register by June 14, 2010.