CENTRAL MICHIGAN UNIVERSITY
GLOBAL CAMPUS
COURSE SYLLABUS

I. IDENTIFYING INFORMATION

Course: STA 282
Course Title: Introduction to Statistics
CRN: 22220493
Term: Spring II
Location: Online
Course Dates: 3/4, 4/26/2013
Course Days and Times:
Prerequisites: MTH 105 or equivalent competency.

Blackboard
Blackboard is a web-based learning management system licensed by CMU. Within Blackboard, a course website, also known as a *shell*, is automatically created for every CMU course. Face-to-face courses may or may not incorporate Blackboard, whereas Blackboard course shells are always used for online courses and will be available to you prior to the course start date. Seeing the course shell listed in Blackboard with *unavailable* adjacent to its title is an indication that your instructor has not made it available and is in no way indicative of registration status. To access Blackboard, open a web browser and enter http://blackboard.cmich.edu. After the site loads, enter your CMU Global ID and password in the respective spaces provided. Click the "login" button to enter Blackboard and then the link to the appropriate course to enter the course's Blackboard shell. If you need assistance, contact the IT Helpdesk at 989-774-3662 / 800-950-1144 x. 3662. Self-guided student tutorial resources are also available at http://www.cmich.edu/blackboard.

Instructor: Richard Cassle
Primary Phone Number: Emergency Number: 248-891-2627
Secondary Phone Number: CMU IT Help: 989-774-3662
E-Mail Address: cassl1rs@cmich.edu
Availability: 24/7 online
Academic Biography:

Dick Cassle retired from DaimlerChrysler in June of 2000, after 34 years with the company. He worked in Engineering, Product Planning, Manufacturing, Program Management, Production Control, and Quality Control.

Dick has taught evening courses in Algebra, Statistics, Quantitative Analysis, Project Management, and Forecasting for Lawrence Institute, Oakland University, and Central Michigan University. He has been teaching Statistics and Quantitative Analysis online since 2002.

Dick holds a Bachelors Degree in Mechanical Engineering (U of M), a Masters Degree in Mechanical Engineering (U of M), and a Masters of Business Administration (MSU).

II. TEXTBOOKS AND INSTRUCTIONAL MATERIALS

Order books from MBS at:
http://bookstore.mbsdirect.net/cmu.htm

Textbooks and Course Materials:
Title: **Statistics : Informed Decisions Using Data With CD and Access (9072)**
Author: **Sullivan**
Edition: **4th 13**
ISBN: **978-0-321-89190-7**
Publisher: **Pearson**
Required: **Yes**

III. COURSE DESCRIPTION

Descriptive statistics, probability, sampling distributions, statistical inference, regression. Course does not count on major, minor in mathematics. Credit may not be earned in both STA 282 and STA 382.

IV. COURSE GOALS AND OBJECTIVES

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

1. Use the language and notations of descriptive statistics and inferential statistics.
2. Describe the basic concepts of counting and probability.
3. Explain the concept of expected value and variability.
4. Explain the reasoning behind certain statistical methods used in estimation and hypotheses testing.
5. Apply the basic statistical techniques and procedures for solving estimation problems.
6. Apply the basic statistical techniques and procedures for solving hypotheses testing problems.
7. Apply simple linear regression analysis to solve problems.
8. Read and understand the summarized results of statistical experiments performed by others.
9. Develop interest in the further study of statistics.

V. METHODOLOGY

This is an online course. Students will study and prepare for exams based on his/her schedule. Students can use e-mail to communicate with the instructor if the subject only effects that student. Students can post questions or comments on the discussion board for subjects that may pertaint to at least one other student.

VI. COURSE OUTLINE/ASSIGNMENTS

Pre-Class Assignment:

(1) Navigate the course Blackboard shell (***C10002161*** which combines course 22220485 and course 22220493) to learn the course syllabus, the course requirements, materials available, the exam schedule, the grading policy, the textbook, where to buy the book and so on.

(2) Purchase the REQUIRED e-textbook. You will receive the 'Student Access Code' needed for registering to the online course system, MyLab/Mastering.

(3) Register to the MyStatLab system: You need two pieces of information in order to register to the system:
(a) Your "Student Access Code" purchased in (2) above and (b) the Course ID (provided by instructor). It is possible to register on a temporary basis while waiting for your student access code!
For this section of STA 282, the ***course ID is cassle93727***,

(4) Navigate through the MyStatLab site to get familiar with the e-contents, the homework and exam pages, the multimedia library resources and others.

(5) On the MyStatLab Course Home page, you see a short list of homework. The very first one is 'Week 0 Prepare for Homework '. You need to click on this to do this pre-class assessment to learn how to do homework and take exams on the MyStatLab site.

NOTE 1: This course has a pre-requisite of Intermediate Algebra. It would be a good idea, if a student does not feel comfortable of the pre-requisite, s/he should review the basic mathematics.
NOTE 2: Plan your study time ahead so that you will not get behind.

Course Outline:

NOTE - This is an outline. The actual availability and due dates for these assignments and tests will be posted in th

Blackboard discussion board before the class starts.
Week 1 and 2:
Topics covered:
• Chapter 1: Sections1.1, 1.2, 1.3, 1.4, 1.5,
• Chapter 2: Sections 2.1, 2.2, 2.4,
• Chapter 3: 3.1, 3.2, 3.4, 3.5 1.
Homework and Exam (all of the homework and exam are on MyLab/Mastering site):
• Exam 1: Available: 12:00 am Thursday of Week 2 to10:00 pm Monday of Week 3.
• Homework is assigned for each section covered. Available: Ten days before the term begins to 9:59pm Monday of Week 3.

Week 3 and 4:
Topics covered:
• Chapter 4: Sections 4.1, 4.2, 4.3,• Chapter 5: Sections 5.1, 5.2, 5.3, 5.4
• Chapter 6: Sections 6.1, 6.2
Homework and Exam (all of the homework and exam are on MyLab/Mastering site):
• Exam 2: Available: 12:00 am Thursday of Week 4 to 10:00 pm Monday of Week 5.
• Homework is assigned for each section covered. Available: 12:00 am Monday of Week 3 to 9:59 pm Monday of Week 5.

Week 5 and 6:
Topics covered:
• Chapter 7: Sections 7.1, 7.2, 7.3
• Chapter 8: Sections 8.1, 8.2
• Chapter 9: Sections 9.1, 9.2
Homework and Exam (all of the homework and exam are on MyLab/Mastering site):
• Exam 2: Available: 12:00 am Thursday of Week 6 to 10:00 pm Monday of Week 7.
• Homework is assigned for each section covered. Available: 12:00 am Monday of Week 5 to 9:59 pm Monday of Week 7.

Week 7 and 8:
Topics covered:
• Chapter 10: Sections 10.1, 10.2, 10.3
• Chapter 11: Sections 11.1, 11.2, 11.3
• Chapter 14: Sections 14.1
Homework and Exam (all of the homework and exam are on MyLab/Mastering site):
• Exam 2: Available: 12:00 am Thursday of Week 8 to 10:00 pm Saturday of Week 8..
• Homework is assigned for each section covered. Available: 12:00 am Monday of Week 7 to 10:00 pm Saturday of Week 8 - the Saturday after the class officially ends..

Materials Available for each Chapter:
• On Blackboard site: Key chapter points from your instructor.
• On MyStatLab site: E-textbook contents, Multimedia Videos, Technology Manual, and others.
.

<u>Assignment Due Dates</u>:
Your final grade is determined based on:
Homework (20%), Exam 1 (20%), Exam 2 (20%), Exam 3 (20%) and Exam 4 (20%)
See the discussion board for specific due dates for this course!
• Only one attempt for each exam. You have 150 minutes for each exam.
• Unlimited attempts for each homework.
• All homework and exams are in the MyLab/Mastering site.

<u>Post-Class Assignment</u>:
Complete the course evaluation.

<u>Student Involvement Hours</u>:
This is a quantitative course. The requirement of this course is to successfully complete homework assignments and four exams. The time needed to study varies greatly from student to student. For some students, it may take over 20 hours to study per week. For some students, it may take less than 10 hours.
Students can contact the instructor at any time using e-mail or discussion board.

VII. CRITERIA FOR EVALUATION

Evaluation Criteria:
Your final grade is determined based on:
• Homework (20%),
• Exam 1 (20%),
• Exam 2 (20%),
• Exam 3 (20%)
• Exam 4 (20%)

Grading Scale:

Grading Policy for the course:
83% or higher : A
80 to 82.9: A-
77-79.9: B+
73 to 76.9: B
70 to 72.9: B-
67 to 69.9: C+
63% to 66.9: C
60 to 62.9: C-
57 to 59.9 D+
53 to 56.9 D
50 to 52.9: D-
Lower than 50%: E

How to compute your final total %?

There are 34 homework assignments, including the chapter zero practice homework assignent.
Add your 34 homework assignment percentages and divide the total by 34. That is your homework percentage.
Add your homework percentage to your four test percentages and divide by 5. That is your final course percentage.
Compare your final course percentage to the grade curve above to determine your final course letter grade.

Late Assignments:
There is no late homework or late exam once the time period is passed.

Make-ups and Rewrites:
There is no make-up homework or exams. You are given an ample amount of time for each homework and each exam.

VIII. EXPECTATIONS

Attendance and Participation:
This is an online course. No attendency is taken.

Academic Integrity:

Because academic integrity is a cornerstone of the University's commitment to the principles of free inquiry, students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in their areas of study. Written or other work which students submit must be the product of their own efforts and must be consistent with appropriate standards of professional ethics. Academic dishonesty, which includes cheating, plagiarism and other forms of dishonest or unethical behavior, is prohibited. A breakdown of behaviors that constitute academic dishonesty is presented in the CMU Bulletin (https://bulletins.cmich.edu/).

Student Rights and Responsibilities:

Each member of the Central Michigan University community assumes an obligation regarding self conduct to act in a manner consistent with a respect for the rights of others and with the University's function as an educational institution. As guides for individual and group actions within this community, the University affirms the general principles of conduct described in the Code of Student Rights, Responsibilities and Disciplinary Procedures at
https://www.cmich.edu/about/leadership/office_provost/dean/Pages/Code-of-Student-Rights.aspx.

IX. SUPPORT SERVICES AND OTHER REQUIREMENTS

Global Campus Library Services (GCLS)

CMU offers you a full suite of library services through its Global Campus Library Services (GCLS) department. Reference librarians will assist you in using research tools and locating information related to your research topic. The library's Documents on Demand office will help you obtain copies of the books and journal articles you need. Check out the GCLS website at http://ocls.cmich.edu for more information.

Reference librarian contact information:

1. By phone: (800) 544-1452.
2. By email: oclsref@cmich.edu
3. By online form: http://ocls.cmich.edu/reference/index.html#form

Documents on Demand office contact information:

1. By phone: (800) 274-3838
2. By email: docreq@cmich.edu
3. By fax: (877) 329-6257
3. By online form: http://ocls.cmich.edu/delivery/index.html

Writing Center

The CMU Writing Center is a free online service for all CMU students, providing help with grammar, citations, bibliographies, drafts, and editing of academic papers. Suggestions and feedback are typically provided within two business days. For additional information and to submit work, visit http://webs.cmich.edu/writingcenter/

ADA

CMU provides individuals with disabilities reasonable accommodations to participate in educational programs, activities and services. Students with disabilities requiring accommodations to participate in class activities or meet course requirements should contact Susie Rood, Director of Student Disability Services at (800) 950-1144, extension 3018 or email her at sds@cmich.edu, at least 4 weeks prior to registering for class. Students may find additional ADA information and forms at http://go.cmich.edu/support_services/academic/StudentDisabilityServices/Pages/default.aspx

Note to faculty: CMU Administration will notify you if applicable; otherwise, the student will provide a "Notification Letter to the Instructor" outlining the accommodations the student is approved to receive.

X. BIBLIOGRAPHY

Aliaga, M. and Gunderson, B., Interactive Statistics, 3rd edition, Prentice Hall, Upper Saddle River, NJ, 2006.

DeVeaux, R.D. and Velleman, P.D., Intro Stats, 3nd edition, Addison Wesley, New York, 2008.

Hawkes, J. and Marsh, W. (2005) Discovering Statistics. Hawkes Publishing, USA.

Keller, G. and Warrack, B. (2004) Statistics for Management and Economics. Thomas Learning: Brooks/Cole, CA.

Lind, D., Marchal, W. and Wathen, S. (2005) Statistical Techniques in Business and Economics. McGraw Hill, NY.

Mann, P. S. (2005) Introductory Statistics (5th edition). John Wiley & Sons, Inc. NY.

McCalve, J. and Sincich, T. (2003) A First Course in Statistics. Prentice Hall, NJ.

Mendenhall, W., Beaver, R. and Beaver, B.M., Introduction to Probability and Statistics, 13th edition, Thomson Learning, Belmont, CA, 2011.

Moore, D. (2003) The Basic Practice of Statistics (3rd Edition). Freeman & Company, NY.

Moore, D. and McCabe, G. (2006) Introduction to the Practice of Statistics (5th Edition). Freeman & Company, NY.

Navidi, W. and Monk, B., Elementary Statistics, Mcgrawhill Education, 2012.

Ott, R.L. and Longnecker, M.T., An Introduction to Statistical Methods and Data Analysis, 6th edition, Duxbury Press, 2008.

Otts, R. and Longnecker, M. (2004) A First Course in Statistical Methods. Thomas Learning: Brooks/Cole, CA.

Pfenning, N. (2011) Elementary Statistics: Looking at the big picture. Cengage Learning: Brooks/Cole, USA.

Rossman, A. and Chance, B. (2001) Workshop Statistics: Discovery with Data and Minitab. Key College Publishing, NY.

Scheaffer, R., Watkins, A., Witmer, J. and Gnanadesikan, M. (2004) Activity-based Statistics. Key College Publishing, NY.

Triola, M.F., Elementary Statistics, 11th edition, Addison Wesley, New York, 2009.

Watkins, A., Scheaffer, R., and Cobb, G. (2004) Statistics in Action. Key Curriculum Press, CA.
Weiss, N.A., Elementary Statistics, 8th edition, Addison Wesley, New York, 2011.

Center Information

- Not Currently Available -