

Iowa Lakes Community College

300 South 18th Street

Estherville, IA 51334

Course Syllabus

Course Title: Statistics/Business Statistics

Course Prefix/Section: MAT-157/BUS-211 (201 – 205)

Semester, Year: Spring 2019

Credits: 4

Class Begins/Ends: January 9, 2019 - May 10, 2019

Meetings Days/Times: Thursday 5:30 – 9:30pm

Class/Lab Location: ILTV System (Rooms at 5 campuses)

Course final: May 9, 2019

Instructor Name: David Burrow

Office: Bishop Garrigan High School

Email: davidburrow@yahoo.com

Phone: 515-341-3763 (text/voice mail)

Office Hours: by arrangement

Course Description:

The use of statistics by the methods of descriptive and inferential statistics. Both single and bivariate data are analyzed. Elementary probability and normal probability distributions are studied along with hypothesis testing, linear correlation regression analysis, and analysis of variance. Prerequisite: appropriate placement score.

Course Prerequisites:

Appropriate scores on placement tests.

Course Learning Outcomes:

Upon the completion of this course, the student should be able to:

1. Have a basic understanding of how to collect, organize, analyze, and interpret data
2. Apply basic probability theory.
3. Demonstrate and interpret estimation methods.
4. Perform and interpret hypothesis tests.
5. Use technology for statistical computations and to demonstrate statistical knowledge.

Learning Outcomes:

	Introduced	Reinforced	Assessed
Critical Thinking and Problem Solving		X	
Communicate Effectively		X	
Professionalism & Civility	X		

Text & Additional Materials

1. Brase & Brase, *Understandable Statistics*, 11th Ed.
2. A TI-83 or TI-84 is required for this course. Calculators will be allowed on all homework, quizzes, and exams. If you do not have a graphing calculator, get one!
3. Additional materials will be provided throughout the semester.

Course Schedule/Outline (Units of Instruction):

(Projected / Subject To Change)

- Chapter 1 Introduction to Statistics
- Chapters 2 & 3 Organizing Data – Averages and Variation
- Chapters 4 & 5 Probability & Related Topics
- Chapter 6 Normal Curves and Sampling Distributions
- Chapter 7 Estimation
- Chapter 8 Hypothesis Testing
- Chapter 9 Correlation and Regression
- Chapter 10 Chi-Square
- Chapter 11 Non-Parametric Statistics & Ethics in Statistics

Methods of Instruction:

This course will be taught primarily through lecture and discussion. Opportunities to practice will be given through homework. It is important for you to participate in class and ask questions. Students who are successful in this class are those students who attend class regularly and fully participate in class.

Grading Scale:

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

Grades will be updated and posted on the Canvas website: <http://www.iowalakes.edu/my-iowa-lakes/>

Grading Policies:

- **Tests** – You will have 4 tests (including the final) over the course of the semester. Notes are not allowed on tests, but you may use calculators and the tables in your book. Each test (including the final) will be worth about 15% of your grade, for a total of 60% in this category.
- **Quizzes** – There will be quizzes most weeks in class. These will cover the material from the previous week. The quizzes may be given at any time during the class, but will most often be after we have gone through the previous assignment. The quizzes as a whole will be worth 15% of your grade.
- **Project** – You will complete an individual or group project during the semester to apply the statistical methods you learn. You will need to complete a prospectus, a progress report, an oral presentation with a graphical display of statistics, and a written summary for the project. All components together will be worth 15% of your grade.
- **Attendance & Class Participation** – You are expected to be present and participate in a positive way in class. A score will be given for each class. You will receive full credit unless you are absent or you detract from the class environment. Attendance and participation will be worth 10% of your grade.

Homework/assignments will not directly count towards your grade. However assignments will be given each week, and you are expected to understand how to do all types of problems.

Makeup Policy:

1. Quizzes may **not** be made up. Your lowest quiz score (which will be a 0 if you are absent) will be dropped.

2. Attendance/class participation may **not** be made up. Your lowest score (which will be a 0 if you are absent) will be dropped.
3. Tests should be taken when scheduled. If you will not be there at that time, you should arrange to take the test **in advance**.
4. All parts of the project should be completed by their due dates. If portions of the project are completed late, the grade will be reduced by a minimum of 10%.
5. Student requests to take final examinations at times other than as scheduled will be granted for only the most urgent reasons. Excessive examination load (three on one day) is a justifiable reason for a change. A student with more than two final examinations scheduled to be administered on the same day is, upon his or her request, entitled to reschedule any overload final examinations for another date and time during the official final examination week. Otherwise, a student's request to take final examinations at times other than as officially scheduled will be granted for only compelling and unforeseeable reasons outside the control of the student. These requests are to be made to the instructor, who will consult with the Campus Dean.

Other Expectations:

1. **Attendance** is extremely important in a night class, since each session is equivalent to 3 – 4 meetings of a day class. In addition to missing out on attendance/class participation points, you are responsible for learning any material you miss if you are gone.
2. **Electronic devices** should be off unless they are being used specifically for academic purposes. While you may use laptops, tablets, or phones for notes and calculations, you should not use them for games, social media, e-mail, music, or similar purposes. Sound should be off, and you should not use headphones. Electronic devices other than calculators will not be allowed on tests or quizzes.
3. You are expected to treat your fellow students and your instructor with courtesy and respect at all times. Realize that in a TV class the microphones are always on. Your voices can be heard at all the other centers.

Assessment of Student Learning:

Iowa Lakes Community College is committed to continuous improvement of teaching and learning. You may be asked to help accomplish this objective. You may be asked to respond to surveys. Tests or assignments completed for this course may be used with other faculty to measure comparability across delivery modes or multiple sections. None of this will affect your grade for the course and confidentiality will be maintained.

Student Handbook:

Students must abide by all policies as stated in the Iowa Lakes Student Handbook, which can be found at: www.iowalakes.edu under Quick Links.

Recording in the Classroom:

Students should be aware that classes might be audio or video recorded by one or more students. The college's policies governing the audio or video recording of class are included in the Student Handbook. Students who have any questions or concerns about class recordings should address their questions or concerns with the instructor at the **beginning of the semester**.

Student Academic Honesty:

Iowa Lakes Community College believes that personal integrity and academic honesty are fundamental to scholarship. Iowa Lakes strives to create an environment where the dignity of each person is recognized and an atmosphere of mutual trust exists between instructors and students. The faculty has confidence in the integrity of the students and encourages students to exercise good judgment in fulfilling this responsibility.

Actions contrary to academic integrity will not be tolerated. Activities that have the effect or intention of interfering with learning or fair evaluation of a student's work or performance are considered a breach of academic integrity. Examples of such unacceptable activities include, but are not limited to:

- **Cheating** (intentionally using or attempting to use unauthorized material, assistance or study aids in my academic work). For example, using a cheat sheet for a test, looking at another student's paper during an exam, stealing or buying all or parts of an exam or paper, altering and resubmitting work for a better grade without prior approval to do so, etc.
- **Plagiarism** (representing another's ideas, words, expressions or data in writing or presentation without giving proper credit, failing to cite a reference or failing to use proper documentation, using works of another gained over the Internet and submitted as one's own work).
- **Falsification and/or misrepresentation of data** (submitting contrived or made-up information in any academic exercise). For example, making up data, citing non-existent sources, etc.
- **Facilitating Academic Dishonesty** (knowingly helping or attempting to help another violate any provision of the academic honesty policy). For example, working together on a take-home exam or other assignment when the option has not been made available, giving a paper/assignment to another student for his/her use, etc.
- **Multiple Submissions** (submitting, without prior approval from the instructor involved, any work submitted to fulfill academic requirements in another class). For example, submitting the same paper for two different classes, etc.
- **Unfair Advantage** (trying to gain unauthorized advantage over fellow students). For example, gaining or facilitating unauthorized access to exam materials (past or present); interfering with another student's efforts in an academic exercise; lying about the need for an extension on a paper or assignment; destroying, hiding, removing or keeping library materials, etc.

Disciplinary Action: Any violation of this policy will be treated as a serious matter. The instructor has primary responsibility over classroom behavior and maintaining academic integrity. Students who earn an "F" based on any violation of the Student Academic Honesty Policy may not withdraw from the class (and receive a grade of W). Depending on the nature and severity of the offense, Iowa Lakes Community College reserves the right to exercise disciplinary action as outlined in the Disciplinary Action Section of the Student Handbook.

Americans with Disabilities Act – Policy of Nondiscrimination and Accommodations

It is Iowa Lakes Community College policy to not discriminate against qualified individuals with disabilities and to provide reasonable accommodation(s), as required by law, to otherwise qualified applicants for admission or to students with disabilities in all education programs, activities, services and practices, including application procedures, admissions, course selection, the awarding of degrees, discipline and dismissal. Educational opportunities will not be denied to an otherwise qualified application or student because of the need to make reasonable accommodation(s) or modification(s) for the physical and mental impairment(s) of any such individual.

Iowa Lakes Community College students needing reasonable accommodation(s) and/or modification(s) should contact Jody Condon by phone at (712) 362-5219 or via email at jcondon@iowalakes.edu. To assure that accommodation(s) and/or modification(s) will be ready when classes start, students must make the request as soon as possible, before a semester begins.

It is the policy of Iowa Lakes Community College not to discriminate on the basis of race, color, national origin, sex, disability, age (employment), sexual orientation, gender identity, creed, religion and actual or potential parental, family or marital status in its programs, activities, or employment practices as required by the Iowa Code §§216.6 and 216.9, Titles VI and VII of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d and 2000e), the Equal Pay Act of 1973 (29 U.S.C. § 206, et seq.), Title IX (Educational Amendments, 20 U.S.C §§ 1681 – 1688), Section 504 (Rehabilitation Act of 1973, 29 U.S.C. § 794), and Title II of the Americans with Disabilities Act (42 U.S.C. § 12101, et seq.).

If you have questions or complaints related to compliance with this policy, please contact Kathy Muller, Equity & Title IX Coordinator, 19 South 7th Street, Estherville, IA 51334, 712.362.0433, kmuller@iowalakes.edu, or the Director of the Office for Civil Rights, U.S. Department of Education, Citigroup Center, 500 W. Madison, Suite 1475, Chicago, IL 60661, phone number 312-730-1560, fax 312-730-1576.

A formal discrimination complaint process is published in the [Student Handbook](#), Employee Handbook, and the Affirmative Action Plan of the College.

Learning Support:

Iowa Lakes Success Centers, Libraries, and Educational Counseling Centers offer friendly, supportive learning environments that can help students achieve success. Staff members are available for drop-in assistance during open hours.