STAT 2010 : Business Statistics

2023 Summer Session	
Total Class Sessions: 25 **Class Sessions Per Week: 5** **Total Weeks: 5** **Class Session Length (Minutes): 145** **Credit Hours: 4**	**Instructor: Staff** **Classroom: TBA** **Office Hours: TBA** **Language: English**

Course Description:

Through this course, students will build up a knowledge base of statistical concepts and approaches used in business analysis. This would help students to learn and understand the concepts needed in higher-level courses in economics.

This course covers major parts from Chapter 1-12, and Chapter 14-16 in textbook. Topics discussed includes: data and statistics, descriptive statistics(graphic techniques and numerical measures, basic probability theory, discrete and continuous probability distributions, sampling and sampling distribution, interval estimation, hypothesis testing, statistical inference about mean and population with two means, test of independence and goodness of fit, correlation and regression.

Course Materials:

Statistics for Business and Economics, by David R. Anderson, Dennis J. Sweeney, and Thomas A. Williams, 13th Edition

Course Format and Requirements:

Sessions include traditional PowerPoint lectures, discussions, and other group activities. Open, frank, and fair discussion will be encouraged in class.

Attendance
The only excused absences will be for illness documented by a doctor's note. Unexcused absences will result in an automatic drop in grade. With each unexcused absence your final letter grade will be dropped ½ a grade – NO EXCEPTIONS (e.g.: A to A-).

Course Assignments:

Weekly Assignments:
A problem set will be assigned on a weekly basis. All five assignments make up 20 percent of the final course grade. The problem sets will consist of multiple choice questions, calculation or analytical exercises. They will train you to apply economic statistic tools and concepts in the

same way as you will be required for the exams.

All assignments must be turned in at the start of class on their due date. Late work will not be accepted. Students are encouraged to work together on the problem sets, but each student must turn in individual work. Problem sets are graded on accuracy as well as on effort. Answers that are vague, difficult to read, or appear incomplete will not receive full credit.

Midterm Exams:

Two in-class, close-book and cumulative midterm exams will be given through this course. The midterm exams will be based on the knowledge covered in class. No excuse will be accepted if students do not have legitimate excuses for absence. Physician Statement is required for missing the exam due.

Final Exam:

The final will be cumulative and close-book. Note that the final will not be taken during the normal class times. Exact time and location for final will be announced later.

Course Assessment:

Weekly Assignments	20%
Midterm Exams 1	20%
Midterm Exams 2	20%
Final Exam	40%
Total	**100%**

Grading Scale (percentage):

A+	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F
98-100	93-97	90-92	88-89	83-87	80-82	78-79	73-77	70-72	68-69	63-67	60-62	<60

Academic Integrity:

Students are encouraged to study together, and to discuss lecture topics with one another, but all other work should be completed independently.

Students are expected to adhere to the standards of academic honesty and integrity that are described in the Chengdu University of Technology's Academic Conduct Code. Any work suspected of violating the standards of the Academic Conduct Code will be reported to the Dean's Office. Penalties for violating the Academic Conduct Code may include dismissal from the program. All students have an individual responsibility to know and understand the provisions of the Academic Conduct Code.

Special Needs or Assistance:

Please contact the Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material. Our goal is to help you learn, not to penalize you for issues which mask your learning.

Course Schedule:

Week	Topics	Activities
1.	Go through syllabus Course overview **Chapter 1:** Data and Statistics (Excel and SPSS) **Chapter 2and 3 :**Descriptive Statistics Tabular and Graphical Displays; Numerical Measures **Chapter 4:**Introduction to Probability Concept of probability; Additive and Multiplicative law;	Weekly assignment
2.	**Chapter 4:** Introduction to Probability Conditional probability; Bayes' Theorem, Independence **Chapter 5:** Discrete Probability Distributions Expected Value; Variance and Covariance; Binomial and Poisson distribution **Chapter 6:** Continuous Probability Distributions Uniform Distribution; Exponential Distribution; Normal Distribution; Joint Distribution	Review Midterm 1 Weekly assignment
3.	**Chapter 7:** Sampling and Sampling Distributions **Chapter 8:** Interval Estimation **Chapter 9:** Hypothesis Tests, Type and Type II Errors	Weekly assignment

4.	**Chapter 10:** Inference about Means and Proportions with Two Populations **Chapter 11:** Inference about Population Variances **Chapter 12:** Chi-s-Square Test, Test of Independence and Goodness of Fit	Review Midterm 2 Weekly assignment
5.	**Chapter 14:** Simple Linear Regression **Chapter 15:** Multiple Linear Regression **Chapter 16:** Regression Analysis Course summary Review for final	Review Weekly assignment Final Exam