Nanchang University
STAT 11: Introduction to Statistics

Credit: 4

Contact Hours

This course is composed of 24 lecture sessions, 3 tutorial sessions and 9 office contact hours. Each lecture session takes 2 contact hours in length; each tutorial session takes 3 contact hours in length;There will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours)at the end of this term. This course has 72 contact hours in total.

Course Description

This introductory course in statistics is designed for a broad range of majors. Here are the specific topics: displaying and describing data, the normal curve, regression, probability, statistical inference, confidence intervals, and hypothesis tests with real-world applications.

Course Learning Outcomes

After taking this course, students should be able to:
- understand fundamental statistical concepts and some of their basic applications in science and society.
- organize, manage, and present data.
- use and apply specific statistical methods.
- understand the mathematical basis and foundations of probability and statistics.

Required Textbook

Intro Stats, De Veaux, Velleman and Bock, 5th edition, 2017, Pearson

Grading

- Participation and discussion   10%
- Assignment and Homework   20%
- Midterm   30%
- Final Exam(including writing paper)   40%

A+	96-100	A	90-95	A-	85-89
B+	82-84	B	78-81	B-	75-77

C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

Course Schedule

The course has 24 class sessions in total. All sessions are 2 contact hours in length. At the end of this term, there will be a Q-A review session(3 contact hours) and Final Exam (3 contact hours).
Note: the course outline and required readings are subject to change.

Class 1:
Introduction

Class 2:
Displaying and Describing Data

Class 3:
Relationships Between Categorical Variables — Contingency Tables

Class 4:
Understanding and Comparing Distributions

Class 5:
The Standard Deviation as a Ruler and the Normal Model

Class 6:
Scatterplots, Association, and Correlation

Class 7:
Linear Regression

Class 8:
Regression Wisdom

Class 9:
Multiple Regression

Class 10:
Sample Surveys

Class 11:
Review

Class 12:

Midterm

Class 13:
Experiments and Observational Studies

Class 14:
From Randomness to Probability

Class 15:
Sampling Distributions and Confidence Intervals for Proportions

Class 16:
Confidence Intervals for Means

Class 17:
Testing Hypotheses

Class 18:
More About Tests and Intervals

Class 19:
Comparing Groups

Class 20:
Paired Samples and Blocks

Class 21:
Comparing Counts

Class 22:
Comparing Counts（Cont）

Class 23:
Inferences for Regression

Class 24:
Inferences for Regression（Cont）

Attending Policy

Regular and prompt attendance is required. Under ordinary circumstances, you may miss two times without penalty. Each absence over this number will lower your course grade by a third of a letter and missing more than five classes may lead to a failing grade in the course. Arriving late and/or leaving before the end of the class period are equivalent to absences.

Policy on "Late Withdrawals"

In accordance with university policy, appeals for late withdrawal will be approved ONLY in case of medical emergency and similar crises.

Academic Honesty

Nanchang University expects all students to do their own work. Instructors will fail assignments that show evidence of plagiarism or other forms of cheating, and will also report the student's name to the University administration. A student reported to the University for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

General Expectations:

Students are expected to:
— Attend all classes and be responsible for all materials covered in class and otherwise assigned;
— Complete the day's required reading and assignments before class;
— Review the previous day's notes before class and make notes about questions you have about the previous class or the day's reading;
— Participate in class discussions and complete required written work on time;
— Refrain from texting, phoning or engaging in computer activities unrelated to class during the class period;
— While class participation is welcome, even required, you are expected to refrain from private conversations during the class period.

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.