



Nanchang University STAT 26: Statistical Methods I

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 course covers: basic concepts of elementary probability, discrete and continuous probability distributions, sampling distributions, estimation, and hypothesis testing. Inferences for means, variances, proportions, one-way ANOVA, simple linear regression, and contingency tables. SAS will be adopted for homework and assignments.

Required Textbook

Statistics, 13th Edition, James T. McClave, Terry T Sincich, 2017 Pearson, ISBN 9780134080215

Grading

- Participation and Discussion 10%
- Homework 20%
- Midterm 1 20%
- Midterm 2 20%
- Final Exam 30%

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:

Statistics, Data, and Statistical Thinking

Class 2:

Methods for Describing Sets of Data

Class 3:

Probability

Class 4:

Probability

Lab 1

Class 5:

Discrete Random Variables

Class 6:

Discrete Random Variables

Lab 2

Class 7:

Continuous Random Variables

Class 8:

Continuous Random Variables

Lab 3

Class 9:

Sampling Distributions

Class 10:

Sampling Distributions

Class 11:

Lab 4

Class 12:

Midterm

Class 13:

Inferences Based on a Single Sample: Estimation with Confidence Intervals



Class 14:
Inferences Based on a Single Sample: Estimation with Confidence Intervals
Lab 5

Class 15:
Inferences Based on a Single Sample: Tests of Hypothesis

Class 16:
Inferences Based on a Single Sample: Tests of Hypothesis
Lab 6

Class 17:
Inferences Based on Two Samples: Confidence Intervals and Tests of Hypotheses

Class 18:
Inferences Based on Two Samples: Confidence Intervals and Tests of Hypotheses

Class 19:
Lab 7

Class 20:
Simple Linear Regression

Class 21:
Simple Linear Regression
Lab 8

Class 22:
Simple Linear Regression (Cont)

Class 23:
Categorical Data Analysis

Class 24:
Categorical Data Analysis (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.