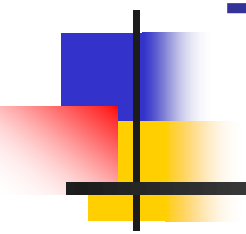
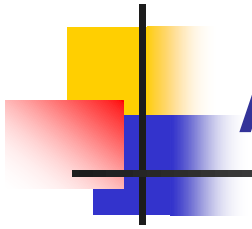
Business Statistics: Quantitative Methods and Techniques



Lecture 1: Course Overview



Agenda

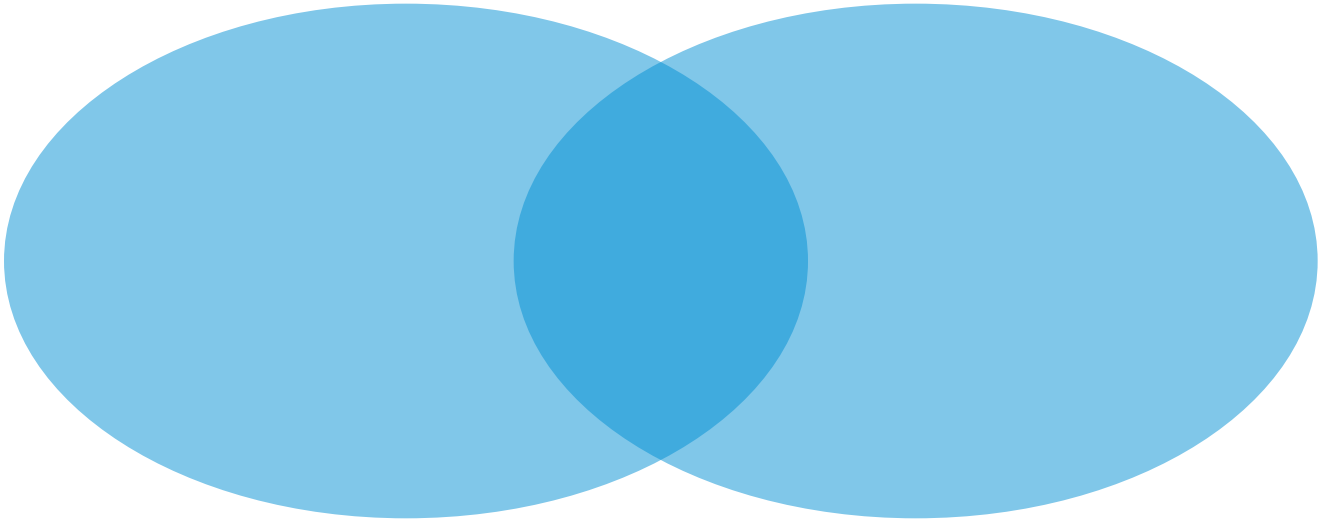
- Course Introduction

Course Information

- Instructor: Dr. Sunho Jung
  - Office: Room 710, Orbis Hall
  - E-mail: khu.stat.online@gmail.com

- Course Details:
  - Online lecture
  - e-campus
  - e-mail (Q/A, Discussion)

Problem Solving



Problem space Solution space

DIKW model

- Data - Information - Knowledge - Wisdom

번호	종류	금액	시간대
T01	커피+빵	10,000	8:30
T02	커피+빵	10,000	8:32
T03	커피+빵	10,000	9:00
T04	커피	3,000	10:26
T05	커피	5,000	12:00
T06	커피	3,000	12:30
T07	커피+빵	10,500	13:00
T08	커피	12,000	13:30

Focus of Course

- This course aims to introduce students to the basic concepts of statistical methods which are commonly used in business and related fields.
  - Introduction to statistics
  - Descriptive statistics
  - Probability and distributions
  - Estimation
  - Hypothesis testing
  - Regression analysis

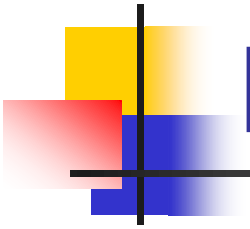
Course Material

- The course will utilize lectures and workshops.

- No textbook is required for this course.
  - References:
    - Jaggia & Kelly (2021). *Business Statistics: Communicating with Numbers*. McGraw Hill
    - Keller (2008). *Managerial Statistics*, 8th Edition, South-Western, Cengage Learning

Evaluation Criteria

- Exams 90%
  - 40% for midterm exam
  - 50% for final exam
- Class attendance 5%
- Class participation 5%



Examination

- One midterm exam and one final exam
- The exam consists of a mixture of multiple choice and open questions on all matters discussed during the lectures and the workshops

Overview of Business Statistics

- Business statistics is a broad topic.
  - Statistics
  - Computer Science
- Business statistics is widely applied.
  - Marketing
  - Human resource management
  - Economics
  - Finance
  - Health, sports, and politics
- Business statistics combines qualitative reasoning with quantitative tools.
  - Identify key business problems
  - Translate data analysis into decisions
  - Improve business performance

Overview of Business Statistics

- Business statistics begins with understating the business context.
  - Ask the right questions
  - Identify the appropriate analysis
  - Communicate information
- Numerical results are not very useful unless they are accompanied with clearly stated actionable business insights.
- There are three different types of analytics techniques.
  - Descriptive analytics: what has happened?
  - Predictive analytics: what could happen in the future?
  - Prescriptive analytics: what should we do?