

National Kaohsiung University of Hospitality and Tourism Course Outline

Grade : 111

Semester : 1

Class : 421A Class 1A, Four-Year Technical College Program in Food and Beverage Management

Subject : 403010 Basic Statistics

Chinese Course Outline

Credit : 2

Course Hours : TU(3,4)

Instructor : tient

Office Hour : Thu. 2,3,4

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Item	Content
Teaching Purpose	(1)To help the student create the basic concepts of statistics. (2)To improve the students' ability in data analysis and statistical inference. (3)To help the student realize how to apply the statistical tools to solve problems and make decision.
Course Content	This course will learn how to apply statistics to life. From the statistical table and chart, it is easy to understand the meaning of data. Using probability theory analyzes the event probability. Also, the normal distribution will be introduced in the class. Using hypothesis tests the significant level. Finally, applying statistical tools analyzes the problems.
Week 1	Basic concepts of statistics I
Week 2	Basic concepts of statistics II
Week 3	Statistical tables and charts – Frequency table, Statistical charts
Week 4	Descriptive statistics (I) – Measures of central location
Week 5	Descriptive statistics (II) – Measures of dispersion
Week 6	Probability (I) –Probability theory and application
Week 7	Probability (II) – Marginal probability and conditional probability
Week 8	Discrete random variables – Discrete probability distribution, Expectation, Variance, Binominal distribution, Poisson distribution
Week 9	Midterm exam
Week 10	Continuous random variables - Normal distribution theory and application
Week 11	Sampling distribution (I) - Sampling methods, Law of large number, Central limit theorem
Week 12	Sampling distribution (II) - Sampling distribution application
Week 13	Hypothesis testing (I) - Hypothesis testing concepts
Week 14	Hypothesis testing (II) - Hypothesis testing application
Week 15	Statistics software application (I) – Questionnaire and data edit

Week 16	Statistics software application (II) – Factor analysis, Reliability analysis, T test, ANOVA analysis
Week 17	Final exam
Week 18	Case study - Big Data
Grades	Daily score 30%, Midterm exam 30%, Final exam 40%.
Texts and Reference Materials	Handouts.
Office Hour	Thu. 2,3,4
Please evaluate whether this course is an "Innovative Teaching Course".	<input type="text" value="Not used"/>
Please evaluate whether this course is an "Innovative Entrepreneurship Course".	<input type="text" value="Not used"/>
Please evaluate whether this course is a "Programming Course".	<input type="text" value="Not used"/>
Please evaluate whether this course is a "STEM Course".	<input type="text" value="Please select"/>

※ Innovative Teaching Course: It is a course developed in view of the need for the school to “flip” the conventional teaching method to improve students’ learning motivation and learning effectiveness. By employing innovative and learner-oriented teaching methods such as problem-solving teaching, it aims to promote students’ motivation and enthusiasm for learning, thereby improving their learning outcomes.

※ Innovative Entrepreneurship Course: It is a course developed for the school to offer courses on innovative entrepreneurship that are appropriately designed to address the different academic backgrounds and learning needs of the students, involve design thinking, innovative practices, or self-designed learning activities, and inspire students to engage in innovative and creative thinking.

※ Programming Course: Programming course is a course in answer of the Ministry of Education’s call for customized programming courses for different professional domains and applications. It enables universities to provide students with an opportunity to study programming in preparation for digital economy, regardless of whether they are from an information technology background. It is expected to enhance students’ literacy in information technology, thereby acquiring basic knowledge on logic operation and programming.

※ STEM Course: Courses related to Science, Technology, Engineering or Math are called STEM Filed Class.

(If the class (one or more) is matched with above field, please fill out.)

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Accroding to the Gender equality meeting held on 29th March, 2018 ,If gender equality issues are integrated into the curriculum, please fill in the Course Outline for reference.

The following link is to resources related to gender equality : <http://gender.nkuht.edu.tw/p/412-1041-1215.php?Lang=zh-tw>