## ②国立東華大學 教學計劃表 Syllabus

|  | 名稱(中文)<br>ume in Chinese  | 心理統計(上)   |                                   |           | 學年/學期<br>Academic Year/Sen            | 109/1   |         |  |  |  |
|--|---|---|-----------------------------------|-----------|---------------------------------------|---------|---------|--|--|--|
|  | 課程名稱(英文)<br>Course Name in English Psychological Statistics(I)  |   |                                   |           |                                       |         |         |  |  |  |
|  | 十目代碼<br>rse Code  | CPB0030   | 系級<br>D30 Department 學一<br>& Year |           | 開課單位<br>Course-Offering<br>Department | 諮商」     | 與臨床心理學系 |  |  |  |
|  | 修別<br>Type  | 學程 Program 學分數/時間<br>Credit(s)/Hour(s) 3.0/3.0  |                                   |           |                                       |         |         |  |  |  |
|  | e課教師<br>structor  | /林慧菁  |                                   |           |                                       |         |         |  |  |  |
|  | C修課程<br>Tequisite   |   |                                   |           |                                       |         |         |  |  |  |
| 課程描述 Course Description  |   |   |                                   |           |                                       |         |         |  |  |  |
| This course provides students with an introduction to the science of making sense out of numerical data. Knowledge of statistics provides statistical literacy that enables people to understand and make sensible judgments based on the analysis of numerical information. This course is designed to teach students how to apply statistical concepts and interpret the results of a variety of statistical techniques from both descriptive and inferential statistics. The major contents covered include measures of central tendency and variability, probability, distributions of sample means, estimation and confidence intervals, and hypothesis testing concerning means. |   |   |                                   |           |                                       |         |         |  |  |  |
|  | 課程目標 Course Objectives  |   |                                   |           |                                       |         |         |  |  |  |
| To allow students to become more informed persons who can critically evaluate claims that are made in scientific (and less formal) settings.<br>To develop an appreciation for the conceptual bases that support statistical evaluation.<br>To learn how to interpret and perform several fundamental statistical procedures, as well as to evaluate situations and decide which procedures are appropriate.<br>To gain enough knowledge of basic statistical procedures to enable students to apply it to more advanced topics that they will study later in their career.  |   |   |                                   |           |                                       |         |         |  |  |  |
| 圖示說明I  | llustration :   | ● 高度相關 Hi   | ghly correla                      | ated ○‡   | 度相關 Moderatel                         | y corre | lated   |  |  |  |
|  |   | 授課進   | 度 表 Teachin                       | g Schedul | e & Content                           |         |         |  |  |  |
| 週次Week   | 內容 Subject/Topics 備註Remarks   |   |                                   |           |                                       |         |         |  |  |  |
| 1  | Brief introduct   | Brief introduction: Introduction to statistics  |                                   |           |                                       |         |         |  |  |  |
| 2  | Ch1. Variables, Data structure, Populations and Sample, Research<br>Methods, Measurement (sec1-2)   |   |                                   |           |                                       |         |         |  |  |  |
| 3  | Ch1. Variables, Data structure, Populations and Sample, Research<br>Methods, Measurement (sec1-2)<br>Ch2. Frequency distribution, percentiles and percentile ranks, data<br>distribution charts |   |                                   |           |                                       |         |         |  |  |  |
| 4  | Ch2. Frequency distribution, percentiles and percentile ranks, data<br>distribution charts<br>Ch3. Central tendency: selecting a measure and shape of the<br>distribution                       |   |                                   |           |                                       |         |         |  |  |  |
| 5  | distribution<br>Ch4. Variabilit   | 2h3. Central tendency: selecting a measure and shape of the<br>distribution<br>2h4. Variability: standard deviation, variance |                                   |           |                                       |         |         |  |  |  |
| 6  | Ch4. Variability: standard deviation, variance<br>Ch4. Variability: unbiased statistic and more   |   |                                   |           |                                       |         |         |  |  |  |

| 7   | Ch5. z-Scores: location of scores and standardized distributions  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|
| 8   | Ch6. Probability: Binomial and normal distributions<br>Midterm review   |  |  |  |  |  |  |  |
| 9   | 期中考試週 Midterm Exam  |  |  |  |  |  |  |  |
| 10  | Exam review<br>Ch7. Probability and Samples: the distribution of sample means   |  |  |  |  |  |  |  |
| 11  | Ch7. Probability and Samples: the distribution of sample means and<br>more<br>Ch8. Making inference: Hypothesis testing |  |  |  |  |  |  |  |
| 12  | Ch8. Making inference: Hypothesis testing   |  |  |  |  |  |  |  |
| 13  | Ch9. Introduction to t-distribution and t statistic   |  |  |  |  |  |  |  |
| 14  | Ch9. Hypothesis testing about one mean<br>Ch10. Testing difference between two independent means                        |  |  |  |  |  |  |  |
| 15  | Ch10. Testing difference between two independent means  |  |  |  |  |  |  |  |
| 16  | Ch11. Testing two related means and estimation  |  |  |  |  |  |  |  |
| 17  | Chll. Testing two related means and estimation<br>Course Review and question answering                                  |  |  |  |  |  |  |  |
| 18  | 期末考試週 Final Exam  |  |  |  |  |  |  |  |
| 教 學 策 略 Teaching Strategies   |   |  |  |  |  |  |  |  |
| <ul> <li>✓ 課堂講授 Lecture</li> <li>✓ 分組討論Group Discussion</li> <li>● 參觀實習 Field Trip</li> <li>● 其他Miscellaneous:</li> </ul> |   |  |  |  |  |  |  |  |
|   | 教 學 創 新 自 評 Teaching Self-Evaluation  |  |  |  |  |  |  |  |
| 創新教學(   | Innovative Teaching)  |  |  |  |  |  |  |  |
| 問題導向學習(PBL) 團體合作學習(TBL) 解決導向學習(SBL)   |   |  |  |  |  |  |  |  |
| →   |   |  |  |  |  |  |  |  |
| 社會責任(   | <br>社會責任(Social Responsibility)   |  |  |  |  |  |  |  |
| 「 在地實踐Community Practice 」 産學合作 Industy-Academia Cooperation  |   |  |  |  |  |  |  |  |
| <br>跨域合作(Transdisciplinary Projects)  |   |  |  |  |  |  |  |  |
| □ 跨界教學Transdisciplinary Teaching □ 跨院系教學Inter-collegiate Teaching   |   |  |  |  |  |  |  |  |
| ──業師合授 Courses Co-taught with Industry Practitioners  |   |  |  |  |  |  |  |  |
| 其它 other:   |   |  |  |  |  |  |  |  |

| 學期成績計算及多元評量方式 Grading & Assessments   |            |          |          |          |          |          |          |          |    |
|---|------------|----------|----------|----------|----------|----------|----------|----------|----|
| 配分項目 配分比例 多元評量方式 Assessments  |            |          |          |          |          |          |          |          |    |
| Items   | Percentage | 測驗<br>會考 | 實作<br>觀察 | 口頭<br>發表 | 專題<br>研究 | 創作<br>展演 | 卷宗<br>評量 | 證照<br>檢定 | 其他 |
| 平時成績 General<br>Performance   | 10%        | ~        | ~        |          |          |          |          |          |    |
| 期中考成績 Midterm Exam  | 30%        | ~        |          |          |          |          |          |          |    |
| 期末考成績 Final Exam  | 30%        | ~        |          |          |          |          |          |          |    |
| 作業成績 Homework and/or<br>Assignments   | 30%        | ~        | ~        |          |          |          |          |          |    |
| 其他 Miscellaneous<br>()  |            |          |          |          |          |          |          |          |    |
| 評量方式補充說明<br>Grading & Assessments Supplemental instructions   |            |          |          |          |          |          |          |          |    |
|   |            |          |          |          |          |          |          |          |    |
| 教科書與參考書目(書名、作者、書局、代理商、說明)<br>Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)  |            |          |          |          |          |          |          |          |    |
| Gravetter, Frederick J and Larry B. Wallnau, Statistics for the Behavioral Sciences, Cengage Learning<br>India; 10th edition (2015)                   |            |          |          |          |          |          |          |          |    |
| 課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)<br>Teaching Aids & Teacher's Website(Including online teaching information.<br>Personal website can be listed here.) |            |          |          |          |          |          |          |          |    |
| http://faculty.ndhu.edu.tw/~hclin/index.html  |            |          |          |          |          |          |          |          |    |
| 其他補充說明 (Supplemental instructions)  |            |          |          |          |          |          |          |          |    |
|   |            |          |          |          |          |          |          |          |    |
|   |            |          |          |          |          |          |          |          |    |