

# 國立屏東大學 110學年度第2學期 教學課程綱要

※為保護智慧財產權，請勿非法影印教科書。

班別：教育心理與輔導學系一年甲班(CN110)      課程學分數：3.00(3.00小時)

授課老師：張麗麗(345000)

必選修：必

開課序號	1453														
科目名稱	教育統計(二)(PSC2341)														
科目英文名稱	Statistical Methods in Education II														
授課語言	/全外語授課														
主要教學型態	課堂教學														
教學目標	<p>1.Students will develop an understanding of the applied intermediate statistics (i.e., 1-sample z-test, 1-sample t-test, two-sample t-test, one-way and two-way ANOVA, correlation, simple linear regression, multiple regression, chi-square statistics).</p> <p>2.Students will be able to choose and apply appropriate statistical methods in analyzing research data.</p> <p>3.Students will be able to use SPSS to conduct data analyses, interpret and report the results appropriately and accurately.</p> <p>** This course emphasizes conceptual understanding (including formula understanding) and practical application (including software operation and report writing)。</p>														
每週課程內容及教學方法	<table border="1"> <thead> <tr> <th>Week</th><th>Content</th></tr> </thead> <tbody> <tr> <td>1</td><td>Review sampling distribution and hypothesis testing (review quiz) Reading: ch. 7, 8</td></tr> <tr> <td>2-3</td><td>Introduction to the t statistic Reading: ch. 9</td></tr> <tr> <td>4-7</td><td>The t-test for two related samples and two-independent samples Reading: ch. 10, 11</td></tr> <tr> <td>8-9</td><td>Introduction to analysis of variance (one-way ANOVA, including multiple comparisons) Reading: ch. 12</td></tr> <tr> <td>10</td><td>Midterm Exam.</td></tr> <tr> <td>11-12</td><td>Correlation Reading: ch. 14</td></tr> </tbody> </table>	Week	Content	1	Review sampling distribution and hypothesis testing (review quiz) Reading: ch. 7, 8	2-3	Introduction to the t statistic Reading: ch. 9	4-7	The t-test for two related samples and two-independent samples Reading: ch. 10, 11	8-9	Introduction to analysis of variance (one-way ANOVA, including multiple comparisons) Reading: ch. 12	10	Midterm Exam.	11-12	Correlation Reading: ch. 14
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	13-14 Simple linear regression Reading: ch. 14 The final project will be assigned  15-17 Two-factor analysis of variance  18 Final Exam. Final project due
核心能力	
預期學習成果	1. Understand the statistical concepts and procedures. 2. Apply the statistical concepts and procedures in solving research problems. 3. Demonstrate skills in using SPSS to analyze data set. 4. Interpret and communicate results obtained from data analysis. 5. Know how to write reports based on results obtained from data analysis.
與預期學習成果 搭配的多元評量	Attendance and class participation 5% Homework assignments (on weekly basis) 15% Quiz (3-5) 10% Midterm & Final Exam. 60% Project 10%
主要讀本	1. Gravetter, F. J., Wallnau, L. B., Forzano, L. B., & Witnauer, J. E. (2021). Essentials of statistics for the behavioral sciences (10 ed.). Cengage Learning [雙葉圖書代理] 2. 邱皓政 (2019, 六版)。量化研究與統計分析：SPSS與R資料分析範例。五南圖書。
參考書目	References: 1. Healey, J. F. (2015). The essentials of statistics: A tool for social research. 2. Howell, D. C. (2007, 6th ed.). Statistical Methods for Psychology. Thomson. 3. Kiess, H. O. & Green, B. A. (2014). 統計原理：行為科學之應用(林碧芳譯)。雙葉書廊。(譯自Statistical concepts for the behavioral sciences, 4th, 2010, Pearson Education). 4. Pagano, R. R. (2014). 行為科學統計法(趙碧華、潘中道、郭俊賢譯)。雙葉書廊。(譯自Understanding statistics in the behavioral sciences, 10th, 2013). 5. 余民寧 (2008)。心理與教育統計學。三民書局。 6. 吳裕益 (2007)。心理與教育統計學。雙葉書廊。 7. 吳明隆、涂金堂 (2017)。SPSS與統計應用分析。五南圖書。
其他事項	Email: llychang93@gmail.com Phone: 08-766-3800 ext 31300, 31352 office hour: Thursday 9:30 ~ 12:00, 14:00 ~ 17:30 (or by appointment)