

國立台灣科技大學 114學年 第2學期 課程大綱

Spring 2026 NTUST Course Outline

授課教師：謝育芬

Instructor: Yu-Fen Hsieh

課程名稱：量化研究方法

Course Title : Quantitative Research  
Methods

2026/5/6

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| <p>課程代號： FL5117701<br/>Course Code</p> <p>學分數： 3<br/>Credits</p>  | <p>必選修：選修/半學年<br/>Required/Elective: Elective/Half Yr.</p> <p>先修課程：<br/>Prerequisites</p> |
| <p>節次教室： T2(T4-703-2) T3(T4-703-2) T4(T4-703-2)<br/>Time/Location</p>   |   |
| <p>專業核心能力：<br/>Core Professional Competencies</p> <ul style="list-style-type: none"> <li>■A1. 具備獨立思辨能力</li> <li>■A2. 具備英語文教學研究能力</li> <li>■A3. 具備中英翻譯研究能力</li> <li>■A4. 具備專業英語文溝通研究能力</li> </ul>  |   |
| <p>課程網址：<br/>Course Website</p>   |   |
| <p>課程宗旨：<br/>Course Objectives</p> <p>This course introduces quantitative methods within a social science framework. Students will learn the principles of quantitative research design and statistical data analysis in the fields of applied linguistics and language education. The course includes lectures, hands-on practice, and discussions of research papers and datasets.</p>  |   |
| <p>課程大綱：<br/>Outline of Lectures</p> <p>The course covers the following topics:</p> <ol style="list-style-type: none"> <li>1. Overview of quantitative research methods;</li> <li>2. Descriptive and inferential statistics for analyzing data gathered from quantitative research designs;</li> <li>3. The fundamentals and application of inferential statistics, including sampling techniques, data collection, data analysis, as well as data interpretation and presentation;</li> <li>4. Univariate and bivariate analysis (e.g., correlation, t-test, ANOVA, simple regression) using the SPSS statistical software;</li> <li>5. Discussion and writing of quantitative research papers.</li> </ol> |   |
| <p>授課方式：<br/>Method of Instruction</p> <p>講授 Lecture : 40%</p> <p>分組討論 Group discussion : 20%</p> <p>案例研討 Case study : 0%</p> <p>操做練習 Practical exercises : 40%</p> <p>講授 Lecture : %</p>   |   |
| <p>教科書：<br/>Textbooks</p> <p>materials on Moodle</p>  |   |
| <p>參考書目：<br/>References</p> <p>materials on Moodle</p>  |   |
| <p>修課須知：<br/>Notice</p>   |   |
| <p>評量方式：<br/>Grading</p> <p>Midterm: presentation + paper (CH1-3) 40%</p> <p>Final: presentation + paper (CH1-6) 40%</p> <p>Class Participation 20%</p>   |   |

備註說明： This is an EMI (English as a Medium of Instruction) course designed to provide students with an immersive learning experience, where all lectures, discussions, and course materials are conducted in English to enhance language proficiency and subject understanding.

Notes