

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：胡宗和

Instructor:Tzong-Her Hwu

課程名稱：物理(下)

Course Title : Physics (II)

2026/5/6

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| 課程代號：GD121B001 Course Code | 必選修：必修/全學年 Required/Elective:Required/Full Yr. |
| 學分數：3 Credits | 先修課程： Prerequisites |
| 節次教室：F6(TR-309) F7(TR-309) M10(TR-309) T1(TR-309) Time/Location | |
| 專業核心能力：運用數學、科學及工程知識的能力。 Core Professional Competencies 規劃與執行實驗，並具解析數據之能力。 執行工程實務所需技術、技巧及使用現代化工具的能力。 | |
| 課程網址： https://moodle2.ntust.edu.tw/ Course Website | |
| 課程宗旨：This course mainly include thermodynamics, electromagnetism, and optics. Course Objectives | |
| 課程大綱：Thermodynamics Outline of Lectures Temperature and Heat The kinematic of Gases Heat, Work and Internal Energy First Law of Thermodynamics Second Law of Thermodynamics Electromagnetism Electric charge, electric force and electric field Gauss' s law Electric Potential Electrostatic energy and capacitors Electric current Electric circuit Magnetism - force and field Electromagnetic induction Alternative-Current Circuit Maxwell' s equations and electromagnetic waves Optics (optional) | |
| 授課方式：講授 Lecture：100% Method of Instruction 分組討論 Group discussion：0% 案例研討 Case study：0% 操做練習 Practical exercises：0% 講授 Lecture：% | |
| 教科書：Essential University Physics, 4th Edition, Richard Wolfson, Pearson Education Inc. Textbooks | |
| 參考書目： References | |

Physics for Scientists and Engineers with Modern Physics, by Serway
and Jewett
University Physics
[https://phys.libretexts.org/Bookshelves/University_Physics/University_P
hysics_\(OpenStax\)](https://phys.libretexts.org/Bookshelves/University_Physics/University_Physics_(OpenStax))

修課須知：
Notice

評量方式： Quiz, Homework, Midterm exam, final exam.
Grading

備註說明： N/A
Notes