

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)

2026/6/22

<p>課程代號： TE103B001 Course Code</p> <p>學分數： 3 Credits</p>	<p>必選修：必修/全學年 Required/Electve:Required/Full Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室： F6(TR-309) F7(TR-309) M10(TR-309) T1(TR-309) Time/Location</p>	
<p>專業核心能力： 運用數學、科學及工程知識的能力。 Core Professional Competencies</p> <p> 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。</p>	
<p>課程網址： https://moodle2.ntust.edu.tw/ Course Website</p>	
<p>課程宗旨： This course mainly include thermodynamics, electromagnetism, and optics. Course Objectives</p>	
<p>課程大綱： Thermodynamics Outline of Lectures</p> <ul style="list-style-type: none"> Temperature and Heat The kinematic of Gases Heat, Work and Internal Energy First Law of Thermodynamics Second Law of Thermodynamics Electromagnetism <ul style="list-style-type: none"> 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) 	
<p>授課方式： 講授 Lecture：100% Method of Instruction</p> <p> 分組討論 Group discussion：0%</p> <p> 案例研討 Case study：0%</p> <p> 操做練習 Practical exercises：0%</p> <p> 講授 Lecture：%</p>	
<p>教科書： Essential University Physics, 4th Edition, Richard Wolfson, Pearson Education Inc. Textbooks</p>	
<p>參考書目： References</p>	

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