

課程大綱

一、課程目標 **Course objectives:**

使學生能了解電子學的知識並活用於元件、電路與系統之設計，成為優良的電子工程師。

二、師生晤談時間及地點 **Instructor office hours:**

星期三早上 **10:10-12:00**，科一 **216-2**，其他時間請先約定

三、授課方式 **Teaching approach:** 課堂講解

四、評量方式 **Grading criteria:**

期中考(I)(II)(40%)，期末考(20%)，作業小考(30%)，平常表現(10%)

五、參考書目 **Textbook & references:**

1. Behzad Razavi, **Fundamentals of Microelectronics**, John Wiley & Sons, 2008
2. Donald A. Neamen, **Microelectronics Circuit Analysis and Design**, McGraw-Hill, 4th Ed., 2010.
3. Sedra Smith, **Microelectronic Circuits**, Oxford University Press, 5th Edition, 2004.

備註 **Remarks:**

1. 上課請勿遲到早退, 嚴禁飲食喧嘩. 請同學們遵守智慧財產權及不得非法影印.
2. 任何問題, 請透過 **email: sheu@ncnu.edu.tw**, 或電話 **4881** 分機, 或直接找我面談.
3. **email** 給我時, 請用學校的帳號, 以免被當成垃圾信件而致影響權益.

Course Assistance

- **Office hours: Wednesday 10:00-12:00, or
any time checked with me in advance**
- **My office: Science and Technology Building I, Room 216-2**
- **My email: sheu@ncnu.edu.tw**
- **My phone: campus extension 4881, or 0952-616742**
- **Tutorship: Science and Technology Building I, Room 512**
- **Tutor time: please check with TA**
- **Facebook club, if necessary, will be open for discussion**

Electronics (I)

- **Electrical engineering:** dealt with motors, generators, and wire transmission.
- **Electronics:** the science of moving charges in a gas, vacuum, or semiconductor (but not in metal;) involving transistors and transistor circuits.
- Most electronic circuit design today involves **integrated circuits (ICs)** fabricated on semiconductor material, refers to **microelectronics**.
- The purpose of this course is to provide a foundation for analyzing and designing electronic circuits.
- The first semester of Electronics, and there will be two more semesters.