

線性代數  
Linear Algebra  
資訊工程系四日一B  
課號 2456

Instructor：洪士程 副教授


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Room:理工大樓E726

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# Course Time & Office Hours

## Course Time

 Monday 7,8 (15:30 - 17:20)

 Classroom: G-114

 Wednesday 5 (13:30 - 14:20)

 Classroom: T1-401

## Office Hours

 Wednesday 9:00-12:00

# Credits




 Required or Elective

Required (必修)

 Credits

3 Credits (三學分)

# Goal

-  Impart a knowledge of core areas of linear algebra.
-  Develop a skill in applying mathematics.
-  Give an introduction to:
  - Linear Equations and Vectors
  - Matrices and Linear Transformations
  - Determinants and Eigenvectors
  - General Vector Spaces
  - Coordinate Representations
  - Inner Product Spaces

# Text Book

 **Linear Algebra with Applications, 6th Ed.,  
2008.**

 **Jones and Bartlett, ISBN: 9780763757533  
– Gareth Williams**

# Reference Books

 Reference:





Linear Algebra with Applications, 7<sup>th</sup> edition,  
2005.

Steven J. Leon

Publisher: Prentice Hall

ISBN: 0131857851

# Schedule of Progress (1/2)

-  Introduction to course (week 1)
-  Chap 1 Linear Equations and Vectors  
(weeks 2,3)
-  Chap 2 Matrices and Linear Transformations  
(weeks 4,5,6,7)
-  Chap 3 Determinants and Eigenvectors  
(weeks 8)

# Schedule of Progress (2/2)

- 📄 Midterm exam (week 9)
- 📄 Chap 3 Determinants and Eigenvectors (week 10)
- 📄 Chap 4 General Vector Spaces (weeks 11,12,13)
- 📄 Chap 5 Coordinate Representations (weeks 14,15)
- 📄 Chap 6 Inner Product Spaces (weeks 16,17)
- 📄 Final exam (week 18)



# Resources

 Text Book

 Handout

<http://lmsctl.cyut.edu.tw/>

**LMS-數位學習系統**

# Evaluation

 Quiz (30%)

 Participation (10%)

 Mid exam (30%)

 Final exam (30%)