

科目：代數學(Algebra)

- 參考書：
1. Herstein, I. N. : Topics in Algebra, 2nd.(Chapters 1-6)
  2. Artin, Michael : Algebra, Prentice-Hall International, 1991.(Chapters 2, 5-6, 10, 12-14)
  3. Isaacs, I. M. : Algebra, a Graduate Course, Brooks/Cole, 1993.(Chapters 1-8, 11-12, 16-21)

Topics :

1. Group theory : homomorphism, group actions, counting formula, Sylow theorems.
2. Ring theory : polynomial rings, PIDs, UFDs.
3. Module theory : fundamental theorem of finitely generated modules over a PID, applications to linear transformations.
4. Field theory : Galois theory.