DATA STRUCTURE

−Brief Introduction

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- **Position and feature**
- **How to learn**
  - **Read more books/program**
  - **Do more exercises**
  - **Do more experiments**
- **Requirements**
  - **1 notebook**
  - **2 exercise books**
  - **1 script book**

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Why is this course required?

- Get you familiar with different data structures and their application.

- Enable you to analyze different algorithms and use the most appropriate one for the application.

- Introduce some basic algorithms used in graph theory.

- Give you more structured programming concept.

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What topics will this course cover?

- Algorithm design and analysis.
- Elementary discrete structures (sets, lists, stacks, and queues).
- Tree structures and relevant algorithms.
- Graph structures and relevant algorithms.
- Searching.
- Sorting.

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What is the objective of this course?

Upon completion of this course, you should be able to:

- Analyze and evaluate algorithms with respect to running time complexity.

- Implement common data structures and algorithms for trees and graphs.

- Design algorithms with increased competence.

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What is expected of me?

- Homework assignments will be given during term and may be collected for grading. The grading of homework may be done on specific questions in homework only.

- Programming assignments will be collected on due date. The collected material for each programming assignment will be explained later.

- Anyone found cheating would receive an automatic F in the course. Substantial help <u>given or received</u> by a student on a programming assignment is considered as cheating.

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How do I make an 'A' in this course?

Grading Policy:

Final	Exam	70%
Homework & Assignments		10%
Experiment		20%
Total		100%

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What is expected of me?

- For every hour class, plan 3 hours of work outside class.

- Ask Questions

- Outside Reading

- Participate in class

- Get Help when you need it

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What are the required materials?

Additional Text Recommended:

数据结构(C语言版)

　　严蔚敏, 清华大学出版社

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