

EL318

Advanced Computer Architecture

Iain McNally

22 lectures

Advanced Computer Architecture

- **Content**

- **Introduction**
- **Advanced Microprocessor Design**
- **Types of Parallel Machine**
- **Architecture Issues**
- **Programming Issues**
- **Case Studies**

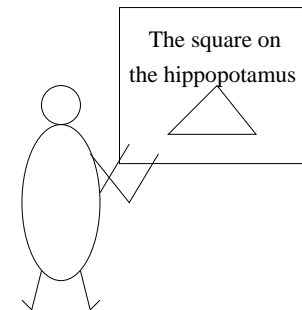
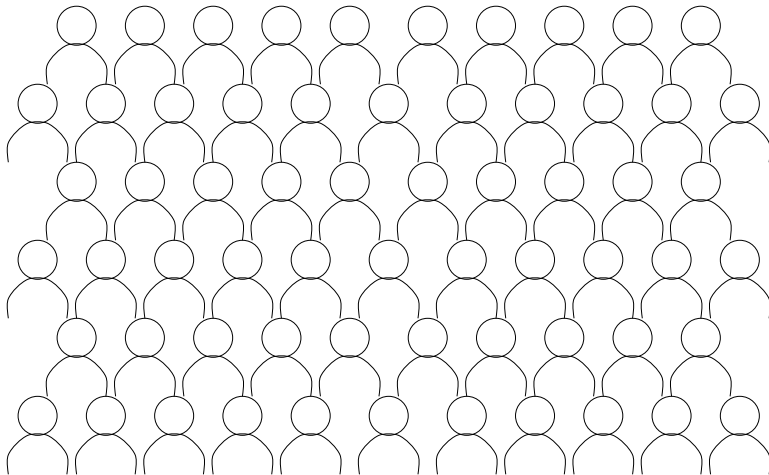
Advanced Computer Architecture

• Books

- **** Advanced Computer Architectures: A Design Space Approach**
Dezso Sima, Terence Fountain & Péter Kacsuk
Addison-Wesley, 1997
- **** Computer Organization & Design: The Hardware/Software Interface**
David A. Patterson & John L. Hennessy
Morgan Kaufmann, 1993
- *** Computer Architecture: A Quantitative Approach**
John L. Hennessy & David A. Patterson
Morgan Kaufmann, 1996
- **Computer Organization & Architecture**
William Stallings
Prentice Hall, 2000
- **Structured Computer Organization**
Andrew S. Tanenbaum
Prentice Hall, 1999

Lecture Style

Lecture (1) A method for the transfer of information from the notes of the lecturer to the notes of the student without passing through the brains of either.



Lecture Style

Lecture (2) A method for the transfer of information from the notes of the lecturer to the brain of the student.

- Pre-written lecture notes:

- Beautiful pictures
- Economy of words

- Lecturer Input:

- Attend
- Explain
- Answer questions

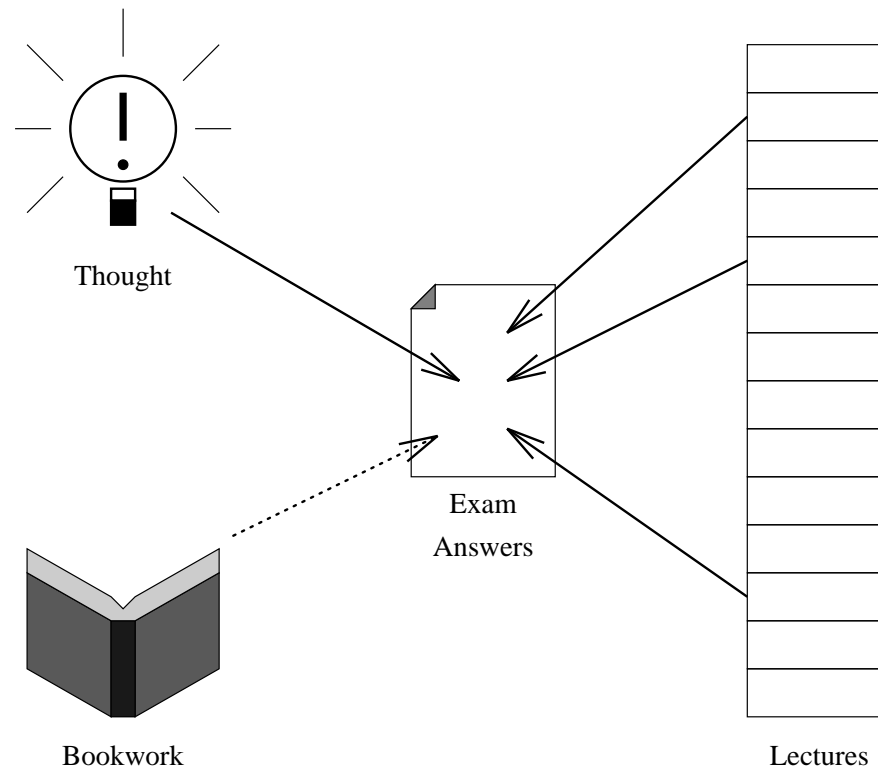
- Student Input:

- Attend
- Ask Questions
- Understand

Exam

- Format: Answer 3 questions from 5 in 2 hours.

Answering questions:



- Each answer may draw on knowledge from a number of lectures.