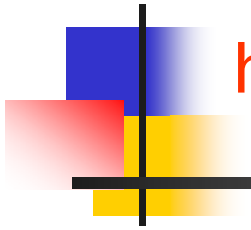

Software Engineering

http://www.cs.ccu.edu.tw/~pahsiung/courses/se/

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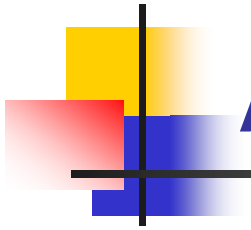


About the course …

- This is a course in SE curriculum (軟體工程學程)
  - http://se.ee.ccu.edu.tw, where you can apply for this SE curriculum
- This is also an e-course (網路課程)
  - http://www.elearning.ccu.edu.tw/
- Online learning required:
  - (P)reviewing of materials
  - Performing tests

國立中正大學軟體工程學程

- 課程修業規定
  - 初階：基礎軟體工程及程式設計與開發
  - 中階：進階軟體系統開發與品質管理方法
  - 高階：軟體產業管理與稽核方法
- 需修滿共21學分，包含：
  - 必修12學分
  - 選修 9學分
  - 其中 9學分不可以算在畢業學分其餘均可

初階課程 (12學分)

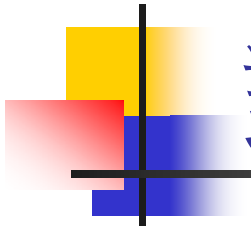
課程名稱	學分數	負責教師
■ 程式語言與設計 or 計算機概論（下）or 程式設計入門	3	資管、資工、電機系 必修課
■ 資料結構	3	資管、資工、電機系 必修課
■ 系統分析與設計、物件導向程式設計	3	資管、資工、電機系 必修課
■ 軟體工程	3	資管系 黃士銘、資工系 熊博安

中階課程 (至少一門)

課程名稱	學分數	負責教師
個人軟體程序程式	3	資工系柯仁松
物件導向軟體工程	3	電機系劉立頌
軟體品質管理	3	資工系林迺衛

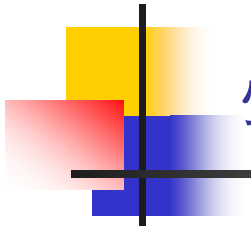
高階課程 (至少一門)

課程名稱	學分數	負責教師
資訊系統控制與稽核	3	資管系阮金聲
CMMI	3	資管系黃士銘



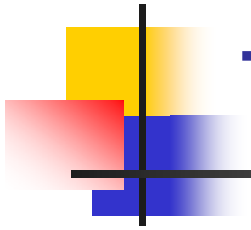
對象

- 本校一般科系之大學部學生，申請資格爲已經修過程式設計類課目之學生。



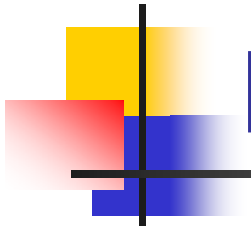
學程理念

- 爲了提昇資訊相關學系學生能具有國際水準，本學程在基礎軟體開發外，加入管理面的課程，
- 課程設計分爲兩部分：
  - 其一爲核心課程(必修12學分)，目的在培養學生軟體系統開發之基礎學理與實做能力，課程包括程式設計、資料結構、系統分析、軟體工程;
  - 其二爲專業選修，目的在於培養學生如何開發高品質軟體系統，在此學生須修完至少各3學分之中階與進階課程，共9學分之課程。



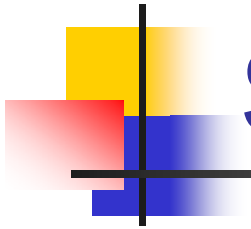
Textbook

- Ian Sommerville, Software Engineering, 7th Edition, Addison Wesley, 2004, 開發代理
- 6 parts, 29 chapters, 713 pages (we will cover some of the chapters only)
- A very comprehensive book on software engineering



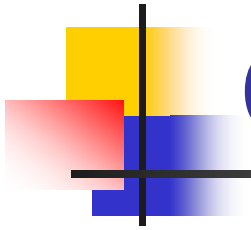
Reference (Books)

- Roger S. Pressman, Software Engineering, 6th Edition, McGraw-Hill, 滄海書局代理
- 軟體工程課程教育改進計畫
  - http://www.sec.org.tw/



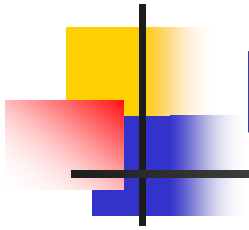
Syllabus

Topic	Chapter	Week
Introduction to SE	(Ch 1)	**1, 2**
SW Processes	(Ch 4)	**3, 4**
Project Management	(Ch 5)	**5**
Requirements Engineering	(Ch 6, 7)	**6, 7**
Mid-Term		**8**
System Models	(Ch 8)	**9, 10**
Software Design	(Ch 11, 13)	**11, 12**
Rapid SW Development	(Ch 17)	**13**
V&V	(Ch 22)	**14**
Project Presentation & Demo		**15, 16**
Final Exam		**17**



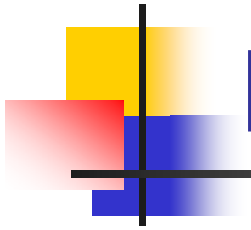
Grading Policy

- Midterm 20%
- Final Exam 20%
- Labs & Assignments 30%
- Project 30%



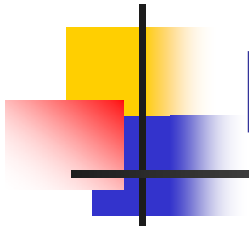
Rules

- Class Quiz:
  - Correct Answer → Bonus Points
  - Queries → Bonus Points
- Class Attendance:
  - 1 absence → Deduct 5%
  - 2 absences → Deduct 10%
  - n absences → Deduct 5n%



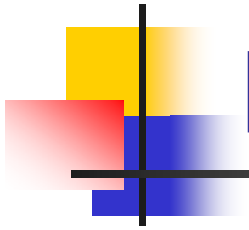
Rules (cont'd)

- Attendance roles will be taken at the start of class.
  - Late comers will be marked as **ABSENT!!!**
- Final Grades **will NOT be** altered!!!
  - E.g. 59% ➔ **FAIL!!!**
- Late Projects **will NOT be** accepted!!!



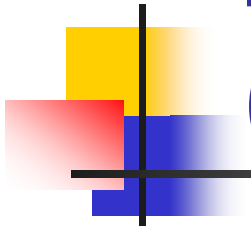
Project Schedule (30%)

- Form a group of proportionate size
- Proposal & Requirements (10%) 10/23
- Specification Documents (15%) 11/6
- Design Documents (25%) 12/6
- V&V Documents (25%) 12/25
- Presentation & Demo (25%) 12/25…



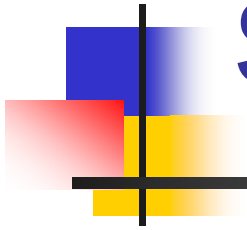
Project Details

- Project Proposals & Requirements:
  - Deadline: October 23, 2006
  - Group: at least 5 students / group
  - Deliverables:
    - **Title**, **members**, **abstract, (1 page)**
    - **Project requirements,**
    - **Project schedule, and**
    - **Project plans**



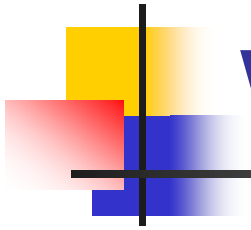
Project Topics (not from textbook!)

- Web-based Voting System
- Safety-Critical Software
- Autonomous (Pervasive) Computing
- Agent Computing
- Web Computing
- Embedded Software (Control, …)
- Real-Time Software (Avionics
- Distributed, Networked Software, …



Software Engineering

ENJOY THE COURSE!!!



What to do now …

- We will announce on the course web site www.cs.ccu.edu.tw/~pahsiung/courses/se
  - How to get an account for e-learning (materials, online tests, …)
  - How to use the I-Logix Rhapsody UML tool to do your project
    - We will do a training in the computer room before the end of September 2006
  - How to submit your project deliverables