# 系統程式
# System Programming
## http://ecourse2.ccu.edu.tw/

熊博安 (Pao-Ann Hsiung)

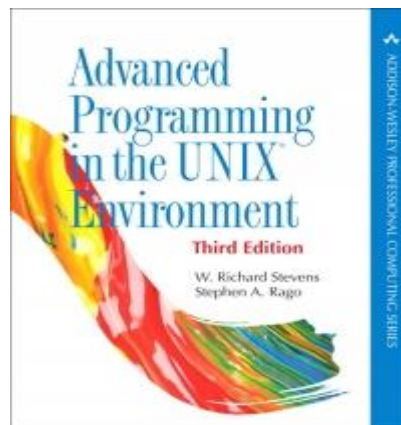國立中正大學資訊工程學系 (CCU CSIE)

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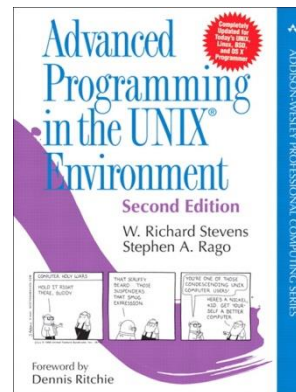
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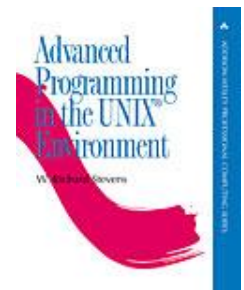
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# Text and Reference Books

- Advanced Programming in the UNIX Environment, 3rd Edition, W. Richard Stevens, Stephen A. Rago, Addison Wesley, 2013, 開發代理 (994 pages), "APUE" in short

3rd Edition

2nd Edition

1st Edition

# About Rich Stevens

- On Wikipedia:
  - http://en.wikipedia.org/wiki/W._Richard_Stevens
- Guru of the UNIX gurus
  - http://dir.salon.com/story/tech/feature/2000/09/01/rich_stevens/index.html
- Usenix Lifetime Achievement Award, 2000

# About Rich Stevens

- Stevens set an example for everyone in the Unix world.
  - **What he didn't know, he determined to find out; what he did know, he strove to pass on to anyone who was interested.**
- In 2000, a year after his death,
  - memories of one of the Unix community's most beloved experts are still fresh and vital.

# Syllabus

| Topic | Chapter | Weeks |
|---|---|---|
| • Overview | 1 | **1~3** |
| • File I/O | 3 | **4~5** |
| • Files & Dirs | 4 | **6~8** |
| • **Mid-Term Exam** | | **9** |
| • Stdio | 5 | **10~11** |
| • Process Env | 7 | **12~13** |
| • Process Control | 8 | **14~15** |
| • Signals | 10 | **16~17** |
| • **Final Exam** | | **18** |

# Grading

- Online quiz (7 chapters)  14%  (21%)

- Programming assignments (7)  35%  (49%)

- Mid-Term Exam  25%  (30%)

- Final Exam  26%  (0%)

- Bonus (Q/A, quiz, **attendance**, …)

# Details

- **Midterm Exam**: 4/12 13:30~15:30
- **Final Exam**: 6/14 13:30~15:30
- **Programming Assignments (total 7)**
  - To be done individually
  - To be submitted in-class or after-class (within 1 week after class)
- **Online Quiz (total 7)**
  - To be done individually
  - To be submitted online

# Rules

- **NO COPYING** of assignments/projects (a single case of copying ➜ BOTH parties will get ZERO point for ALL assignments and projects)

- **NO CHEATING** in exams (BOTH parties will get ZERO points for that exam)

# Rules (cont'd)

- Class Quiz:
  - Correct Answer ➜ Bonus Points
  - Wrong or No Answer ➜ Deduction Points
- Class Attendance:
  - 1 absence ➜ Deduct 5%
  - 2 absences ➜ Deduct 10%
  - n absences ➜ Deduct 5n%

# System Programming

ENJOY THE COURSE!!!

# 可以先做的事情 (預習)

- 使用一台有**Linux**作業系統的主機
  - 用你的帳密登入
  - 學會在系統中以下幾個指令：
    - 資料夾處理指令：ls, rm, touch, chdir, mkdir, rmdir, ...
    - 文件編輯指令：vi (vim), joe, ...
    - 程式編譯指令：gcc, make, ...
  - 學會製作 makefile
  - 3/1 在課堂上還會教大家**Linux**的基本操作