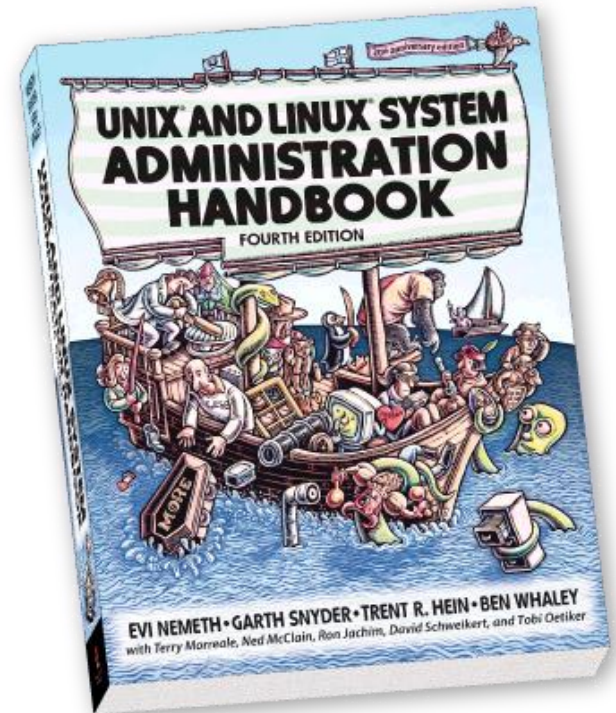


A decorative graphic on the left side of the slide consists of a vertical bar with a blue-to-white gradient. A solid blue horizontal line extends from the right edge of this bar across the width of the slide.

# Network Administration

# Syllabus

- ❑ Website:
  - <http://people.cs.nctu.edu.tw/~huanghs/course/netadm2012/>
- ❑ Instructors:
  - 黃懷陞 huanghs@cs.nctu.edu.tw
  - 蔡佳宏 chiahung@cs.nctu.edu.tw
  - 劉用翔 liuyh@cs.nctu.edu.tw
- ❑ Time:
  - Tue. IJK (PM 6:30 ~ 9:20)
- ❑ Place:
  - EC122
- ❑ Course Newsgroup
  - cs.course.netadmin
- ❑ TAs:
  - We have 4 TAs. (TBA)
  - Email to TAs: [ta@nasa.cs.nctu.edu.tw](mailto:ta@nasa.cs.nctu.edu.tw)
  - IRC channel



# Syllabus –

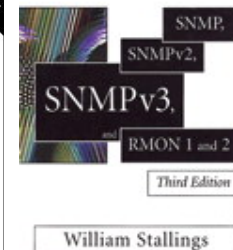
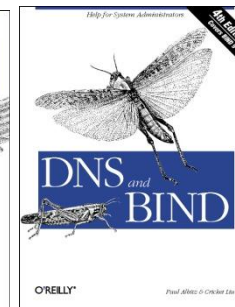
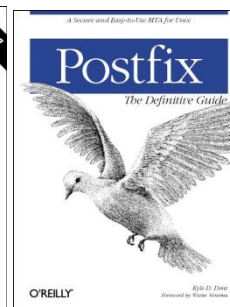
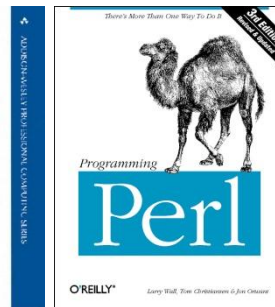
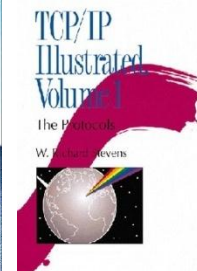
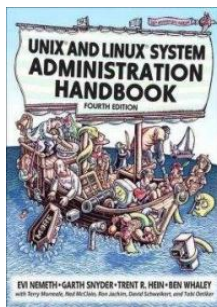
## Course Textbook and Reference

### ☐ Textbook

- UNIX and Linux System Administration Handbook, 4th ed.
- Slides

### ☐ Reference book

- TCP/IP Illustrated Volume 1
- Programming Perl
- Postfix
- DNS and BIND
- SNMP, SNMPv2, SNMPv3 and RMON 1, 2



# Syllabus – Course Overview

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## □ Main topics

- Perl Programming
- Networking
  - TCP/IP Networking
  - Network Environment
  - NAT, DHCP, Firewall, FTP, VPN, Proxy, ...
- DNS -- BIND
- Mail System -- Postfix
  - SPF, DKIM, ...
- PGP -- Pretty Good Privacy
- Usenet -- INN
- Network Management

# Syllabus – Grade Policy

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- ❑ Mid
  - 20%
- ❑ Final
  - 20%
- ❑ Exercise
  - 60 ~ 72%
  - No Delay Work
  - 4 exercises
  - One term project

**Grade will not be normalize.  
Why?  
Do exercise gets points.  
Study book gets points.**

# Syllabus –

## Prerequisite

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### ❑ Background Knowledges

- It is better to have taken
  - “System Administration” (計算機系統管理)
  - “Introduction to Networking” (計算機網路概論)
- At least
  - Experience of using Unix-like environment

### ❑ Environment

- One **dedicated** PC (Or dual OS in your PC, VM is also accepted.)
  - With **Unix-like OS** installed (e.g. FreeBSD, Linux, Sun OS, ...etc.)
  - FreeBSD is recommended, for the reason TA supports.

# Attitude

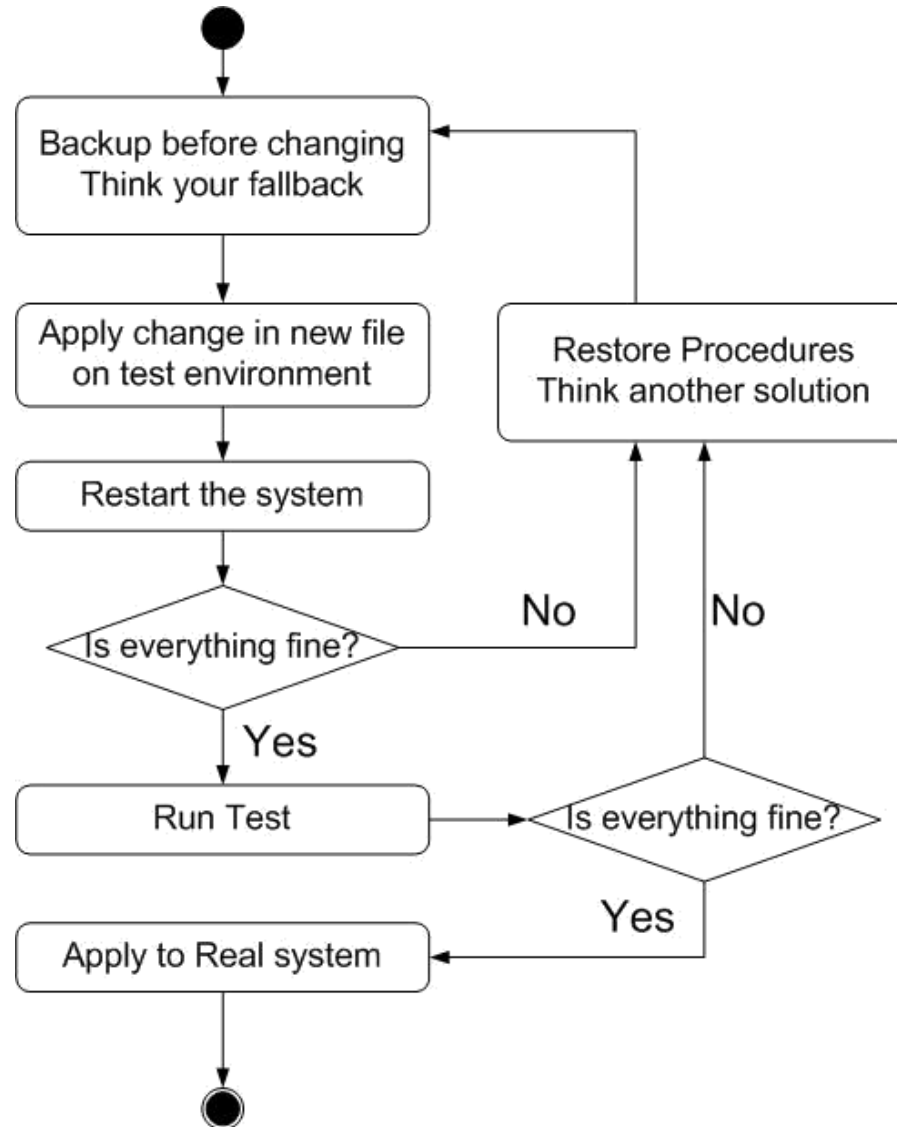
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- Attend every class
- Do every exercise
  - As **early** as possible
  - **On your own**
- Read book and practice at least 6 hours every week
  - Use unix-like environment
  - Recommend: more than 1.5 hours/day averagely.
- Collect information on the internet
  - The newer, the better.



# When You Perform Any Changes...

## □ Flow of Change





# SA-NA Junction

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## ❑ FreeBSD

- 9.0-RELEASE

- [http://people.cs.nctu.edu.tw/~huanghs/course/sysadm2011/slides/GPT\\_RootOnZFS\\_SUJ.ppt](http://people.cs.nctu.edu.tw/~huanghs/course/sysadm2011/slides/GPT_RootOnZFS_SUJ.ppt)

## ❑ Install OS and software (ports)

- <http://www.cs.nctu.edu.tw/~huanghs/course/sysadm2011/>

- [http://people.cs.nctu.edu.tw/~huanghs/course/sysadm2011/slides/02\\_Installing\\_Applications.ppt](http://people.cs.nctu.edu.tw/~huanghs/course/sysadm2011/slides/02_Installing_Applications.ppt)