

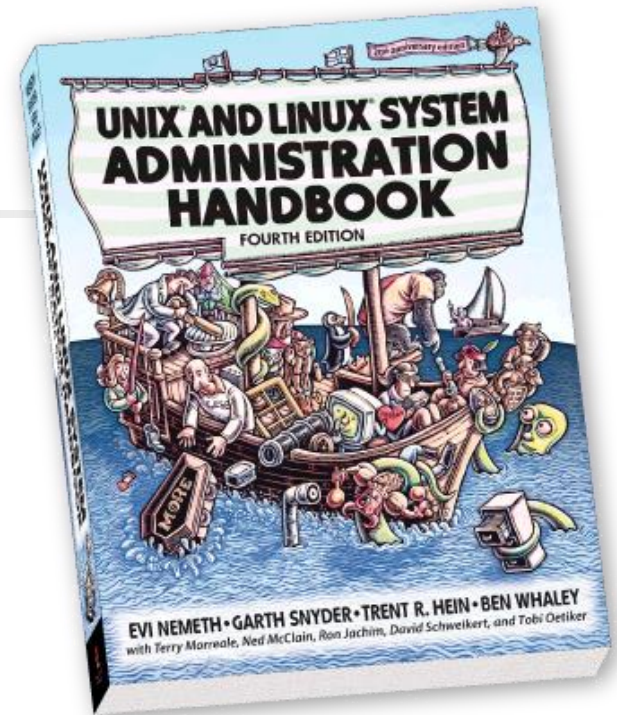


System Administration Practice

chchang2222

Syllabus

- Website:
 - <https://e3.nctu.edu.tw>
- Instructor:
 - 易志偉
- Time:
 - Thu. IJK (PM 6:30 ~ 9:20)
- Place:
 - EC114
- English Slides and Exams, Chinese Lecture (TAs can support)
- TAs:
 - Email to TAs: ta@nasa.cs.nctu.edu.tw
 - IRC channel #nctuNASA (ILoveCSCC) on freenode
- 資安學程 <http://isc.cs.nctu.edu.tw/>
- 大學部雲端系統學分學程 <http://delta.nctu.edu.tw/>



Syllabus –

Course Textbook and Reference

❑ Textbook

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

❑ References:

- FreeBSD Handbook
- FreeBSD Porter's Handbook
- FreeBSD Mastery Series
- Archlinux Wiki

Syllabus –

Course Overview (1/2)

❑ Main Topics

- FreeBSD Installation
- Package Management
- Shell Scripting
- User Management
- File System & Disks
- Network Filesystem
- Service Management
- Driver and Kernel
- Periodic Processes & Syslog
- Virtualization: bHyve and Jail
- Performance, Security and System backup

Syllabus –

Course Overview (2/2)

❑ Seminar Topics

- OpenStack Introduction (Gemini)
- OpenStack Hands-on (Gemini)
- How To Build Your Own Rack? (Edge-core)
- ITSM & ITIL Introduction (ITRI)
- IT Service Level Agreement: Definition and Implementation (ITRI)

Syllabus – Grading Policy

❑ Midterm

- Date: 2016/11/10
- 15~20%

❑ Final

- Date: 2017/01/12
- 15~20%

❑ Exercise

- 60 ~ 75%
 - No Delay Work
 - 5 exercises

Syllabus –

Prerequisite

❑ Background Knowledges

- It is better to have taken
 - “Introduction to Computers and Programming” (計算機概論)
 - “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.

Syllabus – Schedule

日期	周	課程內容	上課地點
2016/9/15	1	中秋節放假	
2016/9/22	2	Syllabus	EC114
		Install FreeBSD 10.3	
		Package Management	
2016/9/29	3	Shells	EC114
		Shell Programming	
2016/10/6	4	OpenStack 介紹課	EC114
2016/10/13	5	User Management	EC114
2016/10/20	6	File System & Disks	EC114
2016/10/27	7	NFS	EC114
2016/11/3	8	OpenStack 實作課	EC315
2016/11/10	9	期中考	EC114
2016/11/17	10	Service Management	EC114
2016/11/24	11	Driver and kernel	EC114
2016/12/1	12	How to build your own rack?	EC114
2016/12/8	13	ITSM & ITIL Introduction	EC114
2016/12/15	14	Periodic Processes & Syslog and log rotate	EC114
2016/12/22	15	Jail	EC114
		bHyve	
2016/12/29	16	IT Service Level Agreement 定義與實做	EC114
2017/1/5	17	Performance	EC114
		Security	
		System backup	
2017/1/12	18	期末考	EC114

Attitude

- Attend every class
- Do every exercise
 - As **early** as possible
 - **On your own**
- Read books 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.



SA-NA Junction

❑ FreeBSD

- 10.3-RELEASE
 - <http://ftp.tw.freebsd.org/pub/FreeBSD/releases/ISO-IMAGES/10.3/>

We Want You!

