

Final Words

Hsuan-Tien Lin

Dept. of CSIE, NTU

June 16, 2015

Before the Midterm

- Basics of DSA/C++
- Arrays: dense, sparse
- Linked Lists: singly, circular, doubly
- Analysis Tools
- Stacks, Queues, Dequeues: expression parsing
- List/Iterator
- Trees: general, binary, traversal

After the Midterm

- Heap
- Hashing: chaining, probing, dynamic
- Skip Lists
- Search Trees: BST, AVL, 2-3-4, RB
- Sorting: bubble, selection, insertion, shell, merge, heap, quick [BST], counting, radix

Three Excellent Things in the Course (1/3)

很好: Hard Working Students

- challenging homework/class, but **many of you work hard**
- hyponosis-like English teaching, but **many of you fight sleepiness hard**
- good performance, **beyond expectation!**

Three Excellent Things in the Course (2/3)

很好: Super TAs

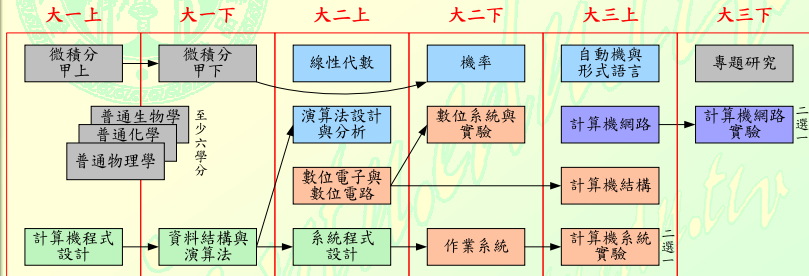
- many homework problems—**very difficult to grade**
- many questions—**very difficult to answer**
- TAs: enthusiastic and worked **lots more than needed**

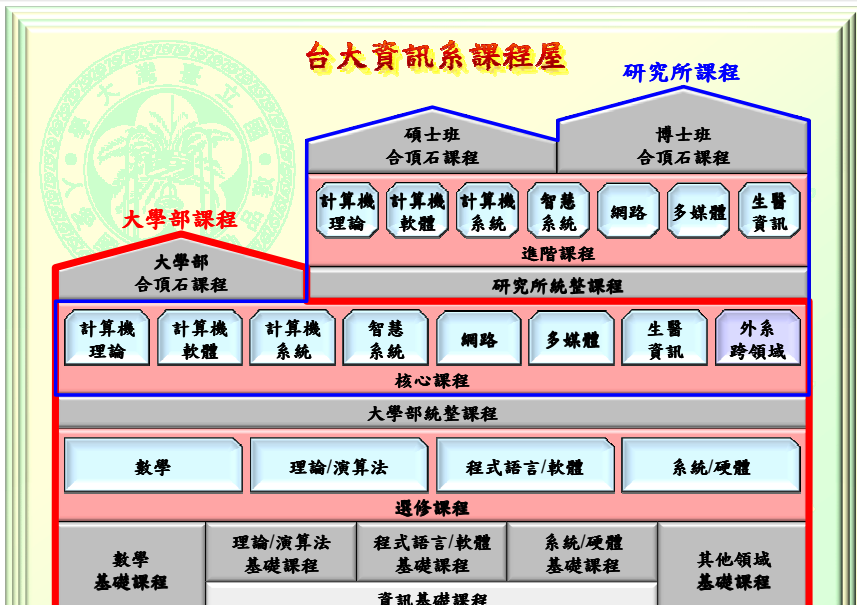
Three Excellent Things in the Course (3/3)

很好: Active Instructor

- high pressure to try to teach in English
—**especially when students don't laugh out loud when hearing jokes**
- not in my best health condition to teach well
—**especially with the lack of sleep**
- instructor still active and **very persistent in telling jokes**

系定必修課程流程圖





How to Be an Excellent Programmer?

ability / characteristic	related courses
sincere, communication, work hard, ...	
domain knowledge	
language feature • workable program • bug-free program - e.g., C# property, DateTime.Now • most suitable feature - e.g., if vs. switch statements	Programming Language (Compiler) (Operating System) (Computer Architecture)
program behavior	Data Structure Algorithm
API, library • simple API - e.g., Date, Calendar, GregorianCalendar • complex API, with design concept - e.g., swing's event/listener, RMI	
experience • write program by yourself • trace other's real & good program	(Data Structure) (Algorithm)

Most Important of All: Never Stop Learning!

<http://www.books.com.tw/exep/prod/booksfile.php?item=0010464414>

獻給還在大學裡的師範生們。尤其是今晚想睡 IT 這一行的
一群 IT 小小鳥。來自台灣資訊、通訊、網路、或男生、或女生
在失業中尋求希望。在迷茫中尋找方向
從課餘愛的師範生們
本行不虛度。考好少假日。當好假期。在職心中有點
專業不等待失業。自己給自己信心



浙江大學 著 蔡學謙 編譯

THANK YOU!!