

Final Words

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Before the Midterm

- Basics of DSA/C++
- Arrays: dense, sparse, matrix
- Linked Lists: singly, circular, doubly, recursion
- Stacks & Queues: expression parsing
- Containers

After the Midterm

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

很好: Hard Working Students

- challenging homework/class, but **many of you work hard**
- very good homework performance, **beyond expectation!**

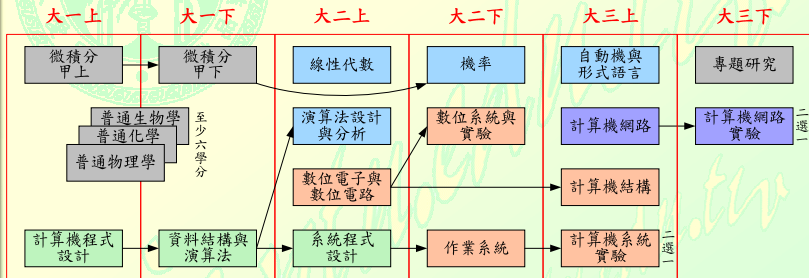
很好: Super TAs

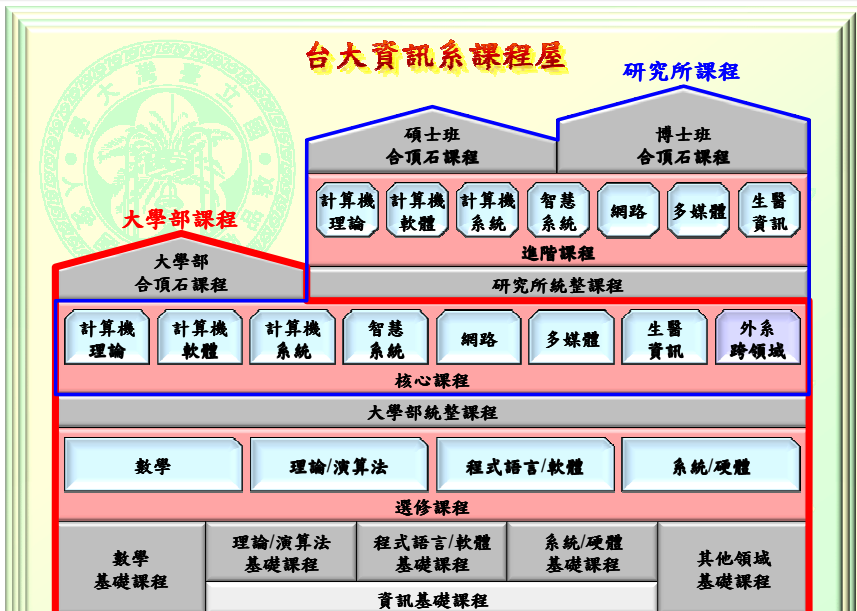
- many homework problems—**very difficult to grade**
- TAs: enthusiastic and worked **lots more than needed**

很好: Active Instructor

- high pressure to try to teach the whole book as much as possible —**especially when students don't laugh when hearing jokes**
- 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 <ul style="list-style-type: none">workable programbug-free program e.g., C# property, DateTime.Nowmost suitable feature e.g., if vs. switch statements	Programming Language (Compiler) (Operating System) (Computer Architecture)
program behavior	Data Structure Algorithm
API, library <ul style="list-style-type: none">simple API e.g., Date, Calendar, GregorianCalendarcomplex API, with design concept e.g., swing's event/listener, RMI	
experience <ul style="list-style-type: none">write program by yourselftrace 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>

獻給還在大學裡的編年級生們，尤其是今晚想幹 IT 這一行的人
一群 IT 小小鳥，來自不同的院校、不同的系、不同的班、不同的生、不同的年
在大學中追求夢想，在迷途中找到方向
祝願所有的編年級生們
本科不虛度，考研少些苦，實習別耽誤，求職心中有數
畢業不事就失業，自己給自己答案



我是一隻 IT 小小鳥



浙江文宇 著 蔡學謙 編譯

THANK YOU!!