### CSIE1212: Data Structures and Algorithms

Hsuan-Tien Lin

Dept. of CSIE, NTU

Course Introduction, February 19, 2012

H.-T. Lin (NTU CSIE)

Data Structures and Algorithms

02/19/2012 0 / 18

## Three Warnings Before (Signing for) the Course (1/3)

## 警告: High Expectations

- goal of NTU DSA class: as good as the best ones in the world
- tentatively, 6–7 homework sets, midterm exam, final project (http://www.csie.ntu.edu.tw/~htlin/course/dsal3spring)
- will have HW1 this week
- writing assignments and time-consuming programming assignments

be prepared to work hard!

## Three Warnings Before (Signing for) the Course (2/3)

## 警告: Strict Instructor

- Will you give me a second chance if I copy homework from other people? No.
- Could you let me pass because I will be kicked out by the 1/2 rule? No.
- Will you change my score from *F* to *C*? No.

be prepared to follow the rules!

## Three Warnings Before (Signing for) the Course (3/3)

## 警告: Uncertain Outcome

- third-time teaching this course
- ambitious and willing to experiment
   —mixed-English teaching, for instance
- How many people will not pass?
   I don't know yet.
- Will your investment (time) get good return (knowledge)? No guarantees, but I'll try my best.

#### be prepared to take some risks!

## 給資訊系的同學們:努力加油 給想加選的同學們:審慎考慮

H.-T. Lin (NTU CSIE)

- instructor: 林軒田 Hsuan-Tien Lin (htlin@csie.ntu.edu.tw)
- office hour: after class or by appointment
- course webpage, mailing list: http://ceiba.ntu.edu.tw/1012dsa (CEIBA)
- course contents actually in www.csie.ntu.edu.tw/~htlin/course/dsa13spring

#### Update your secondary email address on CEIBA!

- Will you repeat the previous code/slide again? Yes.
- Will you discuss with me after class if I don't understand? Yes.
- Will you pardon my silly questions? There are no silly questions.

#### Feel free to ask me questions and give me feedback!

- 106 seats in room 104, thus the limit
- type-3: just go test your luck
- auditing: welcomed (to sit) only if there is an empty chair

#### please think before you choose to enroll

## **Teaching Assistants**

- TAs (tentatively):
  - 林則如
  - 楊涵傑
  - possibly more
- TA email: to be announced

-2+ TAs and 1 instructor around, usually faster than sending to individual

• office hours: to be announced

#### very friendly TAs; ask them more questions!

Taking any unfair advantages over other class members is not allowed. It is everyone's responsibility to maximize the level of fairness.

- eating? fine, but no smells and no noise
- sleeping? fine, but no snoring
- cellphone? fine, but silent mode, and speak outside

o ...

#### applies to instructor, TAs, students

## **NO CHEATING**

## **NO LYING**

## **NO PLAGIARISM**

#### very very very serious consequences

- homework (best \* 1.5 + worst \* 0.5 + others), midterm, final
- supplementary reference: participation in discussions
- raw score goes through some order-preserving normalization steps
  - raw score 80 with term rank A: possible
  - raw score 80 with term rank B: possible
  - raw score 60 with term rank F: possible
  - raw scores 80, 60 with term scores B, B: possible, but unlikely
  - raw scores 80, 60 with term scores F, B: impossible
- may or may not normalize with respect to the other class

#### from the principle: no individual score change

## Collaboration and Open-Book

- homework discussions: encouraged
- but fairness?
   write the final solutions alone and understand them fully
- references (books, notes, Internet): consulted, but not copied from
- no need to lend/borrow solutions

to maximize fairness (everyone's responsibility), **lending/borrowing/buying/selling not allowed** 

to maximize fairness (everyone's responsibility), **lending/borrowing/buying/selling not allowed** 

to maximize fairness (everyone's responsibility), lending/borrowing/buying/selling not allowed

to maximize fairness (everyone's responsibility), lending/borrowing/buying/selling not allowed

Deal? If your classmate wants to borrow homework from you, what do you say?

- students: justify solutions clearly
- TAs: evaluate solutions fairly
- no individual extension unless not violating the principle (e.g. institute-established cases of illness or emergency)
- late penalty: 90% of the value for 12-hour late, 80% of value for 24-hour late, ...

#### four penalty-free late half-days (金牌) per person

# Data Structures and Algorithms in C++, 2nd Edition by Goodrich, Tamassia and Mount.

- please get it as early as possible
- will try to teach a lot from it

learning to read a textbook is part of the course

- weekly
- sections related to what we teach, or sections that are worth reading by yourself
   —we cannot teach all, but with reading you can learn all
- 3-6: 3 hour teaching, 6 hour reading/writing after class

as important as writing assignments: some may show up in exams

- Mandarin: main language
- English: often encountered
  - —teaching (> 1/3), coding, website, assignments, ...
  - -important for your future and you are recommended to practice

#### don't be afraid of English

- Update your secondary email address on CEIBA
- Read the policy thoroughly

#### **Enjoy the Class! Questions?**