

Introduction to Databases

Spring 2020 (Mon & Wed: 11:00)

M1522.001800

Prof. Sang-goo Lee

GENERAL

This is an introductory database course where we will cover the basic topics of database technology, including *data models*, *query languages*, *integrity constraints*, *database design*, *storage structures*, and *transaction processing*. Students are expected to have sufficient programming skills since there will be two term projects with substantial programming involved. Prerequisites are data structures.

Lectures will be conducted in a '*flipped learning*' manner. Students are required to watch the relevant video lectures before coming to class. Checkup quizzes will be given at the beginning of each class.

TEXT BOOK & REFERENCE

- ✓ Textbook:
Database System Concepts, 6th Ed., Silberschatz, et al, McGraw Hill, 2010
- ✓ Reference:
Database Systems, Atzeni, et al, McGraw Hill, 2000.

TERM PROJECTS

Details and dates to be announced later in class

EXAMS (TENTATIVE DATES)

- ✓ 4/29 (Wed): Midterm exam – Chap 1 ~ Chap 8
- ✓ 6/15 (Mon): Final exam – Chap 10 ~ Chap 20

EVALUATION

- ✓ Exams: 25% each (50% total)
- ✓ Term Projects: 30% total
- ✓ Quizzes, Assignments, and others: 20%

* A score of 0 in any one of the exams *will result in F* for the course. A score of 0 in 50% of the reports, projects, or assignments/quizzes *will result in F*.

* Plagiarism will not be tolerated.

CLASS WEB PAGE

<http://ids.snu.ac.kr/site/lectures>

Intro to DB

Tentative Schedule (subject to change without notice)

Week	Dates	Lecture
Week 1	3/2, 3/4	Chap 1: Intro Chap 2: Relational Model
Week 2	3/9, 3/11	Chap 2: (Cont.)
Week 3	3/16, 3/18	Chap 3: SQL
Week 4	3/23, 3/25	Chap 4: Intermediate SQL <i>3/28(Sat) 11am: SQL Lab</i>
Week 5	3/30, 4/1	Chap 7: ER Model
Week 6	4/6, 4/8	Chap 8: Relational DB Design
Week 7	4/13, 4/15	Chap 8: (Cont.) → 3/28
Week 8	4/20, 4/22	Chap 10: Storage & File
Week 9	4/27, 4/29	Chap 11: Indexing & Hashing Midterm Exam
Week 10	5/4, 5/6	Chap 12: Query Processing <i>Children's Day</i>
Week 11	5/11, 5/13	Chap 12: (Cont.) Chap 13: Query Optimization
Week 12	5/18, 5/20	Chap 13: (Cont.) Chap 14: Transaction Management
Week 13	5/25, 5/27	Chap 15: Concurrency Control
Week 14	6/1, 6/3	Chap 20: Data Warehouse & Mining
Week 15	6/8, 6/10	Reviews
Week 16	6/15, 6/17	Final Exam