Introduction to databases

Lia Morra
A.Y. 2025-26

Instructors

- Professor: Lia Morra
- Collaborators: Pietro Basci, Andrea Sordello, Alberto Verna
- Teaching assistant: Francesco Manigrasso
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How to get in touch, beyond the classroom

https://piazza.com/polito.it/spring2026/01rkwlm

We'll be conducting all class-related discussion here this term.

The quicker you begin asking questions on Piazza (rather than via emails), the quicker you'll benefit from the collective knowledge of your classmates and instructors. Emails relating to study material will not be answered.

We encourage you to ask questions when you're struggling to understand a concept—you can even do so anonymously.

Organization of the course

- Lab practices start to be confirmed
- Lectures on site + ~~online streaming~~ + recordings
- Changes announced on Teaching Portal

What	When	Where
Lecture + Exercises	Monday 13:00-16:00	R2
Lecture + Exercises	Wednesday 16:00 – 19:00	R2
Lab	Friday 10:00 – 11:30	Laib1
Lab	Friday 13:00 – 14:30	Laib1

Objectives of the course

- Understand the relational data model

- Know and use query languages for relational databases
  - Relational algebra, a procedural language
  - SQL language, with declarative and procedural features, for queries and updates

- Understand and apply database design methodologies

- Study active database systems and SQL statements for trigger definition

- Develop Python-based applications for database querying and management

Materials

- Course web site
  - https://dbdmg.polito.it/dbdmg_web/index.php/2022/02/24/introduction-data-bases/
  - Slides
  - Exercises
  - Laboratory practices

- Moodle:
  - Homeworks

Exam structure

- The exam is described in the official course information sheet

https://didattica.polito.it/pls/portal30/gap.pkg_guide.viewGap?p_cod_ins=01RKWLM&p_a_acc=2024&p_header=S&p_lang=EN&multi=N

Homework

- 4 **optional** homeworks to be delivered during the course

- 2 extra points max overall

- Validity: until the exam session of February 2026 (included)

- Homework points do not count towards the passing grade

Homework discussion

- Students who have delivered the homework exercises may be asked to discuss the uploaded documentation

- Students will be randomly selected and contacted a few days in advance

- Failure to show = no points will be assigned for the homeworks

Textbook (optional)

- Database Systems - Concepts, Languages and Architectures Paolo Atzeni, Stefano Ceri, Stefano Paraboschi and Riccardo Torlone McGraw-Hill, ISBN 0-07-709500-6

- A free PDF file is available here https://dbbook.inf.uniroma3.it/