



Politecnico
di Torino



Introduction to databases

Lia Morra
A.Y. 2023-2024

Instructors

- Professor: Lia Morra
Department of Control and Computer Engineering
- Collaborators: Davide Calandra, Francesco Manigrasso
- Teaching assistant: Davide Calandra
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How to get in touch, beyond the classroom

<https://piazza.com/class/ltbsxuq3xz260f/>

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 on **March 19th**, 2023 (to be confirmed)
- Lectures on site + online streaming + recordings
- Changes announced on Teaching Portal

What	When	Where
Lecture	Monday 13:00 – 16:00	R2
Lecture	Wednesday 16:00 – 17:30	R2
Lecture	Friday 11:30 – 13:00	R2
Lab	Tuesday 13:00 – 14:30	LabInf
Lab	Friday 10:00 – 11:30	Laib2b
Lab	Friday 17:30 – 19:00	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
 - Homeworks

Exam policy

- The exam is described in the official course information sheet
- In presence, Exam platform, your notebook

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
- Such extra points will be valid until the exam session of February 2025 (included)
- Only if exam is passed

Homework discussion

- Students who have delivered the homework exercises will be contacted to discuss the uploaded documentation
- The homework exercises will be checked with a few students (selected randomly)
- Reference: Davide Calandra, Francesco Manigrasso

Database book

- 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 <http://dbbook.dia.uniroma3.it/>