



Politecnico
di Torino



Introduction to databases

Lia Morra
A.Y. 2022-2023

Instructors

- Professor: Lia Morra
Department of Control and Computer Engineering
- Assistant professor: Daniele Apiletti
- Teaching assistant: Davide Calandra
- Email contact: name.surname@polito.it

How to get in touch, beyond the classroom

piazza.com/polito.it/spring2023/01rkwlm

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 on **March 17th**, 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	Tuesday 8:30 – 11:30	R3
Lab	Friday 10:00 – 11:30	Laib1
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
- On site, Exam platform, your notebook

https://didattica.polito.it/pls/portal30/gap.pkg_guide.viewGap?p_cod_ins=01RKWLM&p_a_acc=2023&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 2024 (included)
- Only if exam is passed

Homework discussion

- Students who have delivered the homework exercises could be contacted to discuss the uploaded documentation
- The homework exercises will be checked with a few students (selected randomly)
- Refer to Davide Calandra

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/>