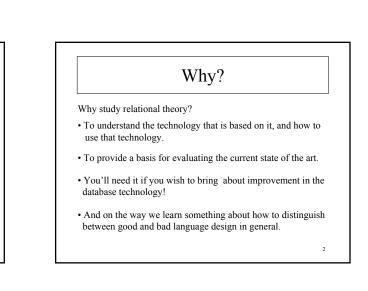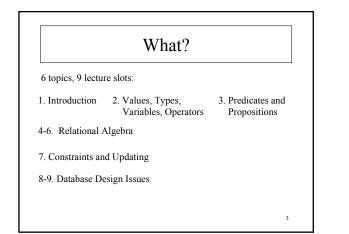# Fundamentals of Relational Databases

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CS252.HACD: Relational Database Theory
(focussing on its application to computer language design)
Section 0: Preface

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Why?

Why study relational theory?

• To understand the technology that is based on it, and how to use that technology.

• To provide a basis for evaluating the current state of the art.

• You'll need it if you wish to bring about improvement in the database technology!

• And on the way we learn something about how to distinguish between good and bad language design in general.

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What?

6 topics, 9 lecture slots:

1. Introduction   2. Values, Types,   3. Predicates and
                        Variables, Operators   Propositions

4-6. Relational Algebra

7. Constraints and Updating

8-9. Database Design Issues

3

How?

• Attend HD's lectures and study the handouts.

• Learn a relational database language, **Tutorial D**.
  (Devised for teaching purposes by C.J. Date and HD)

• Do **Tutorial D** exercises on-line, using *Rel*.
  (*Rel* is Open Source software developed by Dave Voorhis, University of Derby)

• Textbook (free download): *An Introduction to Relational Database Theory* by HD (based closely on CS252)

• Further reading: *Database In Depth* by C.J. Date

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IMPORTANT BIT OF ADMIN

Are you:
(a) an overseas student visiting for just one year, or
(b) doing a degree that is completely outside the CS department? (In which case you should complete an Unusual Option Form, obtainable from your dept secretary)

If so, on exit from this lecture:

Write your name, ITS userid, and course code on the sheet of paper provided.

Otherwise you won't get access to the software needed for the Worksheets!

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