



Conceptual Modelling CSC2507



CSC2507S: Conceptual Modelling


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CSC2507: Conceptual Modelling

- **Instructor:** John Mylopoulos
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- **Lectures:** Fridays 1-4pm, BA7256
- **Marking scheme:**

Survey paper	40%
Course project	40%
Class presentation	20%
- **Objectives:** Learn the state-of-the-art for research and practice in conceptual modelling. Learn how to build well-structured conceptual models.

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Course Requirements

- Survey paper covers a topic and includes material from 2-3 (or more) papers. The paper should be ≤15 pages long, and should be written for a non-expert on the topic (i.e., include examples, explanation.)
- Course project involves a modeling project using a modeling language of your choice. Paper should be ≤40 pages, including diagrams.
- Class presentation consists of a 10' presentation and leading of the discussion for one of the required readings in the course.

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Prerequisites


- Background in Computer Science,
OR
- Background in modeling, from projects or courses on Artificial Intelligence, Software Engineering or Databases; basic knowledge of First Order Logic essential.

Lecture Notes

- Can be downloaded from
www.cs.toronto.edu/~jm/2507S

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Contents

- **Introduction** -- What is Conceptual Modelling?
- **Early Modeling Languages** -- SADT and DFD Diagrams, Extended Entity-Relationship Model
- **Object-Oriented Analysis and UML**
- **Formal Requirements Modeling Languages and KAOS**
- **Description Logics and CLASSIC**
- **Meta-modelling and Telos**
- **Ontologies**
- **Agent-Oriented Software Engineering and Tropos**
- **The Semantic Web**

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General References

- [Boman97] Boman, M., Bubenko, J., Johannesson, P., Wangler, B., *Conceptual Modeling*, Prentice Hall, 1997.
- [Mylopoulos98] Mylopoulos, J., "Information Modeling in the Time of the Revolution", *Information Systems 23 (3-4)*, June 1998.
- [Tsichritzis82] Tsichritzis, D. and Lochovsky, F., *Data Models*, Prentice Hall, 1982.

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