

# Databases and Info Systems

## Module Overview

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# Course Website

- The course website is  
`http://csmoodle.ucd.ie/moodle/`
- Use your UCD login Details
- The course name is COMP2013J Databases and Information Systems
- The enrolment key is DB2020

# Textbook

- The content of this module is based on sections of the following book
  - Fundamentals of Database Systems (6th Edition) by Elmasri and Navathe
  - ISBN-10: 0136086209 — ISBN-13: 978-0136086208
- There is a newer edition of the book, but I have the sixth edition
- All materials will be covered in the lecture notes, but for more detail/examples the book is useful
- There will also be some content from other sources, that will only be detailed in the lecture notes.

# Software

- As part of the course you will be required to carry out some practical work using Structured Query Language (SQL).
- You will need to install MySQL on your own computer to complete the assignment as well as to test code before submitting it for quizzes.
- MySQL can be downloaded from here (<https://dev.mysql.com/downloads/mysql/>) make sure you are getting the community edition (this one is free).
- You should do this for before the start of week 3.

# Assessment

- The module will be assessed based on the following components:
  - Continuous assessment (weekly quizzes and an assignment) 30%
  - Exam (end of semester) 70%

# Continuous Assessment

- The continuous assessment will be based on two components
  - Between 10 and 14 weekly quizzes 10%
  - An individual assignment 20%

## Quizzes

Most weeks you will be required to compete a quiz, some weeks there may be 2. Your grade will be calculated as the average with the lowest quiz score ignored.

## Assignment

In week 4 I will release the details of the assignment. This is to be completed by a single person and I will be checking closely for plagiarism.

# Plagiarism

Plagiarism is a **very serious** academic offence.

- (Student Code, sections 6.2 & 6.3) or (UCD Registry Plagiarism Policy) or (CS Plagiarism policy and procedures)
- I will be looking for possible plagiarism in all submitted work
- Suspected plagiarism is investigated by the CS Plagiarism subcommittee
- Usually includes an interview with student(s) involved
  - 1st offence: **usually** 0 or NG in the affected components
  - 2nd offence: may be referred to the University disciplinary committee
- Student who **enables** plagiarism is **equally responsible**
- <http://www.ucd.ie/students/guide/academicregs.html>
- <http://libguides.ucd.ie/academicintegrity>

# Examples of Plagiarism

- Copying the files of another student and submitting them as your own work
- Copying some/all of an assignment from the Internet/book/etc without referencing it
- Sharing images of your work with another student (by e-mail, Wechat, ...)
- A group of students working on a solution, then individually submitting the same work
- Students collaborating at too detailed a level e.g. consulting each other after implementing a line/block/segment of code and sharing the results



# Module Delivery and Format

Normally, this course would run like normal with Lectures from week 1 to week 15 and labs from week 3 to week 15.

The current plan is to progress through more of the lecture materials at the beginning of the semester and have more labs at the end of the semester when we have returned to university. This gives you more chance to complete work while in university where you can ask questions of me and the teaching assistants more easily. Obviously, this will all be depending on when exactly we are able to return.

# Lectures

- On-line lecture delivery will be mainly done with text
- This will be supplemented with some short videos of difficult topics and some examples
- There will typically more information provided in the text that I upload than I would be provided in the PPT

# Asking Questions

When you have a question, there will be a number of options available to you.

- 1 Ask the question on the moodle forum
- 2 Email me with your question
- 3 On-line office hours

# Moodle Forums

- This is where you should first think of when you have a question.
- That way when the question is answered the answer will be available to your classmates.
- It would be particularly helpful if you answer your classmates questions if you can (In English) as you will probably be able to do this quicker than me.
- I will check over any answer posted and correct them if necessary.
- Comment when you also have the same question, then I can make extra resources like more videos if necessary

# Email

- I will only respond to administrative questions by email.
- Technical questions that I get by email will be ignored unless they were first asked on the forum.
- You should only be emailing me if you have a question about an administrative matter (registration or some other problem).
- Use your UCD or BJUT email address. Many Chinese email addresses will be considered Spam.
- This means that if you are lucky, I will see your email a few weeks later, and if you are unlucky I will never see it

# On-line Office Hours

- There will be some chance to ask questions on-line in real-time.
- This will be something that we will try over the semester.
- Further details will be released, but these systems are typically very good for communicating, but very inefficient for questions (takes a long time to answer a question compared to face to face).
- To make things run more easily, you should have your question well prepared and be able to share your screen to show me what the problem/question is.

# Topics

- Introduction to Databases and Database Models
- The Relational Database Model
- Structured Query Language
- Database Design (Entity-Relationship Model)
- Database Normalisation
- Programmatic Database Use
- NoSQL Databases