

Faculty of Engineering

School of Computer Science and Engineering

COMP1000

Introduction to World Wide Web, Spreadsheets and Databases

T2, 2019

Course Staff

- For any course management related issues e-mail *cs1000@cse.unsw.edu.au*
- Dr Sasha Vassar, Lecturer in Charge (and course admin)
    - a.vassar@unsw.edu.au
- Your tutor will also be able to answer questions in your tutorial/laboratory
    - This semester your tutors are:
        - Ali Darejeh (ali.darejeh@unsw.edu.au) – will also be covering Week 7-9 lectures
        - Alli Murray
        - Elizabeth Willer
- Individual consultation appointments can be arranged by e-mail
- Some issues can be dealt with during the breaks in the lecture
- Outside of consultation times use the on-line forums on Moodle or e-mail the specific staff.

Course Details

- 6 units of credit (UoC)
- The lectures are:
  Tuesday 11-13pm;
  Thursday 13-15pm;
- Lectures are located in the Central Lecture Block 6 (CLB6): https://www.learningenvironments.unsw.edu.au/spaces/central-lecture-block/k-e19-103-central-lecture-block-6
- Each student should be enrolled in a designated 2 hour tutorial/laboratory time slots per week
- Tutorial/laboratory will start in Week 1 and go through until:
    - For Monday tutorials, until Week 11 (due to the public holiday on the 10th June in Week 2)
    - For Tuesday tutorials, until Week 10

Course Summary

This course will explore fundamental concepts of the world wide web (www), spreadsheets and databases. We will explain in straightforward terms the concepts underlying www, spreadsheets and databases and their advantages so that students can exploit them effectively. Besides lectures, this course will have weekly labs. The labs will help you to put into practice the knowledge acquired from lectures; ultimately leading to the outcome that you will be able to develop web, spreadsheet and database applications. Lecture topics are summarised in the Course Schedule below.

Assumed Knowledge

COMP1000 is intended for students with no prior tertiary study of computer science. Many, perhaps most, students who take COMP1000 do so in part to meet the UNSW General Education requirement.

Learning Outcomes

After completing COMP1000, students should:

- Have an informal and yet technically sound knowledge of the fundamentals of the www, and be able to build their own simple web sites, and understand how they work.
- Properly understand the differences between spreadsheets and databases and when it is appropriate to use one rather than the other;
- Understand the computational concepts underlying modern spreadsheet and database applications; and,
- Be able to design and implement sophisticated spreadsheet and database applications

Teaching Rationale

The lectures and labs together are structured to present and re-inforce concepts and techniques required for developing applications involving web design and building of databases and spreadsheets.

Teaching strategies

1. **Lectures** will provide a detailed description of content along with examples related to the key learning areas, namely spreadsheets, web design and databases. There are 4 hours of lecture each week from 1 to 10, divided equally between Tuesday and Thursday two-hourly lecture sessions.

2. **Programming laboratories** provide an opportunity to practise the skills being learned in lectures. In computing particularly, learning requires doing. We have 2 hours of face-to-face lab times, where students can work on in the lab and gain individual feedback from the lab demonstrators.

3. **Assignment** provides an opportunity for students to practice their skills on an individual basis and receive feedback.

4. **Textbooks and reference books** provide supplementary material, and/or a slightly different point of view on the technical material. They also have exercises, describing step-by-step how to perform tasks in Excel and Access.

5. **Consultation sessions** give students an opportunity to ask the lecturers, one-on-one, specific questions about any of the course material that they might be uncertain about.

6. The **mid-session** and **final examination** provide a focus and a deadline to make sure you revise the material covered in the course. Revision can be an important part of learning.

Assessment

The key assessment criteria are outlined below in the table below. A satisfactory performance (>50%) is required in **all** the four components in order to satisfactorily pass the course.

Task	Marks	Due	Topics
Labs	10%	Week 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	WWW and Access
Assignment (Excel)	15%	Week 4 (Tuesday midday)	Excel
Mid-Session Exam	25%	Week 6 (during lecture time Thursday)	Topics Weeks 1-5
Final Exam	50%	Exam Period	All course content

Your final mark for this course will be calculated using the above assessments as follows:

Course_Work_Mark	= marks for the lab	Out of 10
Assn_Mark	= marks for assignment	Our of 15
Mid_Sem_Exam_Mark	= marks for the practical mid-semester exam	Out of 25
Final_Exam_Mark	= marks for practical final exam	Out of 50
Exam_OK	= final exam mark > 25/50	True/False
Final_Mark	= Course_Work_Mark + Assn_Mark + Mid_Sem_Exam_Mark + Final_Exam_Mark	Out of 100
Final_Grade	UF, if !ExamOK (regardless of mark) FL, if FinalMark < 50/100 PS, if 50/100 <= FinalMark < 65/100 CR, if 65/100 <= FinalMark < 75/100 DN, if 75/100 <= FinalMark < 85/100 HD, if FinalMark >=85/100	

Students are eligible for a Supplementary Exam if and only if:

- they cannot attend the final exam due to illness or misadventure (a medical certificate will be required)

A Supplementary Exam will not be awarded for any other reason.

Lab Classes

Each lab class develops skills in the topics covered in recent lectures, and the assessment for the lab is designed to check that you have indeed developed these skills. Labs will commence in Week 1. The lab specification for each week:

- Will outline the criteria by which lab marks will be assigned
- Will be uploaded on Sunday night prior to the first lab
- Labs will be due on the following lab of each week. So for example the lab in Week 1 (lab01) will be marked by your tutor in Week 2, giving you a chance to work on the

lab during your lab time and also through the week. In Week 2, when the lab falls on a public holiday Monday, you will need to submit your lab on Moodle.

- Please use the consultations to seek any help you might have with the issues with your lab. Students may use the CSE labs at other times to complete their lab. Try to avoid other formal class times. When other classes are scheduled for the lab, you may need to work silently. An electronic submission might also be required for each lab.

Late submissions of labs is not permitted. The material covered in lab classes will be tested in the final exam.

Mid-Session Exam

The mid-session test is designed to provide students with feedback on their performance on the topics covered in the first part of the course. It is planned to hold the test during your lecture time in Week 6. The venue of the exam will be advised. This exam will contribute to 25% of your final marks.

Final Exam

The final exam tests students on the learning objectives and the content that has been covered through the 10 weeks of the course and will account for 50% of the final mark.

Special Consideration

If your work in this course is affected by unforeseen adverse circumstances, you should apply for Special Consideration through myUNSW, including documentation on how you have been affected. Please refer to the Special Consideration website for more information and for information how to to apply/procedures:

https://student.unsw.edu.au/special-consideration

If you are registered with Disability Services, please forward your documentation to Dr Sasha Vassar (a.vassar@unsw.edu.au) within the first two weeks of semester.

Academic Honesty and Plagiarism

What is Plagiarism?
Plagiarism is the presentation of the thoughts or work of another as one's own.* Examples include:

- direct duplication of the thoughts or work of another, including by copying material, ideas or concepts from a book, article, report or other written document (whether published or unpublished), composition, artwork, design, drawing, circuitry, computer program or software, web site, Internet, other electronic resource, or another person's assignment without appropriate acknowledgement;
- paraphrasing another person's work with very minor changes keeping the meaning, form and/or progression of ideas of the original;
- piecing together sections of the work of others into a new whole;

- presenting an assessment item as independent work when it has been produced in whole or part in collusion with other people, for example, another student or a tutor; and
- claiming credit for a proportion a work contributed to a group assessment item that is greater than that actually contributed.†

For the purposes of this policy, submitting an assessment item that has already been submitted for academic credit elsewhere may be considered plagiarism.

Knowingly permitting your work to be copied by another student may also be considered to be plagiarism.

Note that an assessment item produced in oral, not written, form, or involving live presentation, may similarly contain plagiarised material.

The inclusion of the thoughts or work of another with attribution appropriate to the academic discipline does *not* amount to plagiarism.

The Learning Centre website is main repository for resources for staff and students on plagiarism and academic honesty. These resources can be located via:

https://student.unsw.edu.au/plagiarism

The Learning Centre also provides substantial educational written materials, workshops, and tutorials to aid students, for example, in:

- correct referencing practices;
- paraphrasing, summarising, essay writing, and time management;
- appropriate use of, and attribution for, a range of materials including text, images, formulae and concepts.

Individual assistance is available on request from The Learning Centre.

Students are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting, and the proper referencing of sources in preparing all assessment items.

* Based on that proposed to the University of Newcastle by the St James Ethics Centre. Used with kind permission from the University of Newcastle
† Adapted with kind permission from the University of Melbourne.

Recommended Reference Textbooks

Recommended books for the course include:

Mary Anne Poatsy, Keith Mulbery, Cynthia Krebs, Lynn Hogan, Amy Rutledge, Eric Cameron, Jason Davidson, Rebecca Lawson, Jerri Williams, Linda Lau, and Robert Grauer. 2016. Exploring Microsoft Office 2016, Volume 1 (1st ed.). Pearson.

Mary Anne Poatsy, Keith Mulbery, Jason Davidson, Robert Grauer. 2016. Exploring Microsoft Office Excel 2016 Comprehensive (Exploring for Office 2016 Series) 1st Edition, Pearson.

Other Resources

- Students seeking resources can also obtain assistance from the UNSW Library. One starting point for assistance is: https://www.library.unsw.edu.au/study/services-for-students

Course Schedule

This is the intended course schedule. Subject to changes. Moodle will contain the up to date schedule.

Wk	*Day*	*Lecture Topics*	*Tutorial/Laboratory*
1	4/6	Course Introduction & Logistics Spreadsheets: Introduction to Excel and Spreadsheet Basics	Lab 1 (due in Week 2 lab) **Assignment released Friday**
	6/6	Spreadsheets: Formulas and Functions Spreadsheets: Charts and Tables	
2	11/6	Spreadsheets: Filtering Data Spreadsheets: Pivot tables	**No lab on Monday due to Public Holiday**
	13/6	Spreadsheets: Pivot Charts and What-if Analysis	Lab 2 (due in Week 3 lab, or on Moodle for Monday labs)
3	18/6	Spreadsheets: What-if Analysis	Lab 3 (due in Week 4 lab)
	20/6	Spreadsheets: Specialised Functions	
4	25/6	Web: HTML5, CSS and Web Layout	Lab 4 (due in Week 5 lab) **Assignment DUE Tuesday midday**
	27/6	Web: HTML5, CSS and Web Layout	
5	2/7	Web: Forms and Javascript	Lab 5 (due in Week 6 lab)
	4/7	Web: Javascript	
6	9/7	**No Lecture**	Lab 6 (due in Week 7 lab)
	11/7	**Mid-Session Exam**	
7	16/7	Databases: Introduction to Databases and Access 2016	Lab 7 (due in Week 8 lab)
	18/7	Databases: Managing database to store data, introducing queries	
8	23/7	Databases: Managing database to store data, introducing queries	Lab 8 (due in Week 9 lab)
	25/7	Databases: Advanced queries and creating forms to make professional input/output interface for the tables	
9	30/7	Databases: Creating reports to make printable version of table's data	Lab 9 (due in Week 10 lab)
	1/8	Databases: Creating reports to make printable version of table's data	
10	6/8	Databases: Reports, Creating data macros	Lab 10 (due Friday midday on Moodle Week 10)
	8/8	Final Exam Format/Q&A	

Course Evaluation and Development

The survey responses of the course offering in 18s1 indicated that overall the students were satisfied with the quality of lectures and mode of delivery. We will continue to implement the same teaching strategy, but also ensure that the lab exercises are well designed to reinforce the lecture concepts covered in the previous week.

This course will be evaluated at the end of the semester using the myExperience system. Closer to the end of the semester, students will receive an email inviting them to provide feedback on the course offering. It is important that students complete the survey to ensure continuous, ongoing improvement of the course.

Other Matters

- Students are expected to attend all classes.
- Students are expected to read their UNSW emails regularly. They are also expected to use their UNSW email addresses for all UNSW related communications.
- Please be aware of **CSE's new Student Conduct statement** available at: http://webapps.cse.unsw.edu.au/cse/student-conduct.html (the content of which is listed below)

Student Conduct

The **Student Code of Conduct** (Information, Policy) sets out what the University expects from students as members of the UNSW community. As well as the learning, teaching and research environment, the University aims to provide an environment that enables students to achieve their full potential and to provide an experience consistent with the University's values and guiding principles. A condition of enrolment is that students *inform themselves* of the University's rules and policies affecting them, and conduct themselves accordingly.

In particular, students have the responsibility to observe standards of equity and respect in dealing with every member of the University community. This applies to all activities on UNSW premises and all external activities related to study and research. This includes behaviour in person as well as behaviour on social media, for example Facebook groups set up for the purpose of discussing UNSW courses or course work. Behaviour that is considered in breach of the Student Code Policy as discriminatory, sexually inappropriate, bullying, harassing, invading another's privacy or causing any person to fear for their personal safety is serious misconduct and can lead to severe penalties, including suspension or exclusion from UNSW.
If you have any concerns, you may raise them with your lecturer, or approach the School Ethics Officer, Grievance Officer, or one of the student representatives.

Plagiarism is defined as using the words or ideas of others and presenting them as your own. UNSW and CSE treat plagiarism as academic misconduct, which means that it carries penalties as severe as being excluded from further study at UNSW. UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW staff and students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. There are several on-line sources to help you understand what plagiarism is and how it is dealt with at UNSW:

- Plagiarism and Academic Integrity
- UNSW Plagiarism Procedure

Make sure that you read and understand these. Ignorance is not accepted as an excuse for plagiarism. In particular, you are also responsible that your assignment files are not accessible by anyone but you by setting the correct permissions in your CSE directory and code repository, if using. Note also that plagiarism includes paying or asking another person to do a piece of work for you and then submitting it as your own work.
If you haven't done so yet, please take the time to read the full text of
UNSW's policy regarding academic honesty and plagiarism
The pages below describe the policies and procedures in more detail:
Student Code Policy
Student Misconduct Procedure
Plagiarism Policy Statement
Plagiarism Procedure
You should also read the following page which describes your rights and responsibilities in the CSE context:
Essential Advice for CSE Students - This site contains important information regarding use of laboratories, originality of assignment submissions and special consideration.

- Please review the official school policies that are all available online at the school web site: https://www.engineering.unsw.edu.au/computer-science-engineering/help-resources/for-students/unsw-computing-policies.
- Please read and understand the School Policy in relation to **laboratory conduct.**
    - Note that no food or drink is permitted in the laboratory. CSE fines will apply.
    - The laboratory is to be secured at all times. No equipment or furniture can be removed from the laboratory.
    - You are not permitted to provide unauthorised access to this laboratory.

    UNSW Occupational Health and Safety policies and expectations are available via the following PDF and website:
    http://safety.unsw.edu.au/sites/default/files/documents/WHS_Policy.pdf

    https://www.engineering.unsw.edu.au/computer-science-engineering/help-resources/health-safety
    - Computer Ergonomics for Students:
    https://www.engineering.unsw.edu.au/computer-science-engineering/help-resources/students/ergonomics
- Students who have a disability are encouraged to discuss their study needs with the course convenor prior to, or at the commencement of the course, or with the Equity Officer (Disability) in the Equity and Diversity Unit (9385 4734). Information for students with disabilities is available at:
    https://student.unsw.edu.au/disability
    Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional examination and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.