COMP4021
Internet Computing

Course Details

COMP4021 Internet Computing

- Welcome to COMP4021 Internet Computing!
- Many students say this is one of the most useful courses that they take
- This PowerPoint goes through all the basic information about the course
- Let's start by listing the goals of the course, using the OBE (outcome based education) style

Course Learning Outcomes

By the end of this course, you will have the following skill set.

1. General Appreciation

1.1. Have a general appreciation of the use of the Internet in society

2. Browser Based Skills

2.1. Be knowledgeable about HTML and related display techniques including CSS

2.2. Understand how to build browser based programs using the JavaScript language, including event handling

2.3. Be able to program advanced browser display technologies, including SVG, and to appreciate the differences

2.4. Develop code for handling communication between web page components such as JavaScript and AJAX

3. Server Based Skills

3.1. Be able to install and understand the operation of a server such as Apache

3.2. Develop server side code in an appropriate language such as PHP

4. Skills Related to Both

4.1. Have a working knowledge of the most common HTTP instructions and their methods of client-server interaction, including cookies

4.2. Understand XML and related technologies including DOM handling

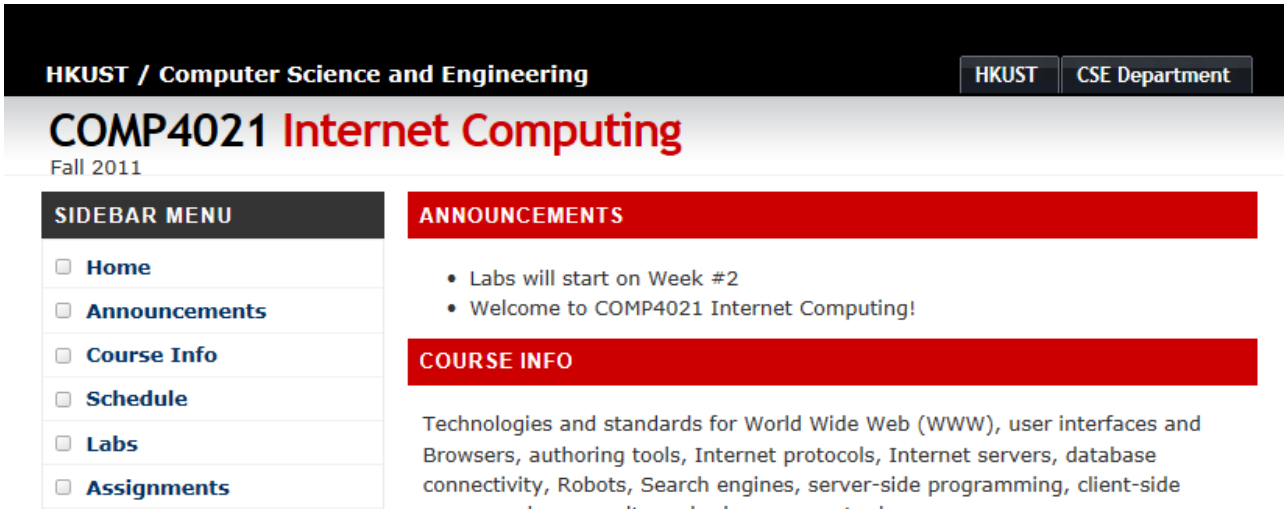
4.3. Develop complex programs for browser-server communications, including use of Ajax

	General	Browser Based Skills				Server Based Skills		Related to Both		
	1.1	2.1	2.2	2.3	2.4	3.1	3.2	4.1	4.2	4.3
Week 1	✓	✓	✓							
Week 2		✓	✓							
Week 3			✓	✓						
Week 4				✓						
Week 5				✓	✓					
Week 6					✓					
Week 7					✓					
Week 8					✓					
Week 9						✓	✓			
Week 10							✓	✓		
Week 11							✓	✓	✓	
Week 12							✓	✓	✓	✓
Week 13									✓	✓

- Approximate weekly schedule

Course Web Site

- All course information is presented via the web at http://course.cse.ust.hk/comp4021/



Course Requirement

- Lectures
  - Lectures are typically used to give a solid introduction to a topic, with demonstrations
  - Then the labs and small projects are used for you to explore the subject in depth
- Labs
  - It is essential that you attend the lab sessions, otherwise it will be impossible to do the project work
- Projects
  - There will be three mini-projects, which will be based on the lab work
  - Project work will be collected using the CASS system, submission details will be given later
- Midterm test
  - This test will be two open notes mid-term exams, of 40 min each
  - The midterms will take place in lectures
- Final exam
  - This will be a 2.5 hour, open note exam

Refer to course homepage for the weights of the components

	General	Browser Based Skills				Server Based Skills		Related to Both		
	1.1	2.1	2.2	2.3	2.4	3.1	3.2	4.1	4.2	4.3
Project 1		✓	✓	✓						
Project 2			✓	✓					✓	
Project 3		✓		✓	✓	✓	✓	✓	✓	✓
Midterm	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Final	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

- Assignment/exam mapping

Conduct and Class Participation

- When you come to the lectures
  - Pay attention to the lecture
  - Do not talk to other students
  - Make sure your phone is off
- If you have questions or ideas about the lectures, raise them for an open discussion
  - Your questions and opinions are highly appreciated
  - All students are encouraged to contribute to discussions

Frequently Asked Questions

- **Is Java taught on the course?**
- There is another course which teaches Java, so this course doesn't cover any Java
- COMP 3021 Java Programming

  Introduction to Java Programming. Fundamentals include language syntax, object-oriented programming, inheritance, polymorphism, exception handling, multithreading. Standard libraries for input/output, graphics programming, built-in data structures. Application programming interface and foundation class library.
- **Are Microsoft products taught on the course?**
- This course doesn't cover Microsoft products in a major way, although some Microsoft things are included.
- **Is networking taught on the course?**
- Although the Internet relies on low-level networks, these are too low level to be included in this course.

Frequently Asked Questions

- Instead, there are several other courses you could take, i.e:

- COMP 4621 Computer Communication Networks I
  - Principles of computer network architectures and communication protocols; the OSI reference model; switching and multiplexing techniques; data link, network, transport and application layers; LAN and medium access protocols; network programming.
- COMP 4622 Computer Communications Network II
  - Multimedia requirements; bridges and their spanning tree protocol; advanced internet protocols (IPv6, Diffserv, IntServ, etc.); congestion control and QoS; multicast and broadcast algorithms; network performance and programming; introduction to network security.

Frequently Asked Questions

- **Any other courses related to COMP4021?**

- COMP 4321 Search Engines for Web and Enterprise Data
- Text retrieval models, vector space model, document ranking, performance evaluation; indexing, pattern matching, relevance feedback, clustering; web search engines, authority-based ranking; enterprise data management, content creation, meta data, taxonomy, ontology; semantic web, digital libraries and knowledge management applications.

- **Can you include XXX or YYY, or even ZZZ in the course?**
- The field of internet computing is very wide, and no course can cover everything. This course makes sure that you understand the most common and useful internet concepts and technologies. You will then find other Internet software/techniques to be easy to learn outside of the course.

Frequently Asked Questions

- **Help! I have a deadline for another project, please can you change the project deadline?**
- I try and set project deadlines so that they don't clash with other work. Unfortunately, this is impossible to do successfully for everyone. Each student has his/her own deadlines for various courses, etc. So it isn't possible to alter project deadlines once released.
- **What if I find some useful code on the internet (not from other students)?**
- You can use it, IF you put comments in your source code which describe the source, including the complete http address. To be safe, ask the instructor first.
- **What happens if I copy from another student?**
- Both you and the other student get zero for that work (standard University policy). It doesn't matter what work is being copied, the policy is the same.
- **But I only copied half of the work... so I should only get half the marks deducted, right?**
- Sorry, the University policy says you get zero.