USC SCHOOL OF ENGINEERING

Introduction to Information Technology
ITP 101x (4 Units)

Spring 2009

Objective	Upon completing this course, students will: - Understand the fundamentals of information technology - Learn core concepts of computing and modern systems - Understand modern software programs and packages - Learn about upcoming IT technologies
Concepts	This course is designed to be an introductory course in information technology. The course focuses on key concepts for understanding modern computer systems. Students will also learn about the capabilities and limitations of information technology systems.
Prerequisites/ Recommended Preparation	None
Instructor	Joseph Greenfield
Contacting the Instructor	joseph.greenfield@usc.edu | 213-740-4604 | OHE 530C
Office Hours	TBA
Lecture	12:30 – 1:50 Tuesday & Thursday, KAP 160
Lab	2:00 – 2:50 Monday & Wednesday, OHE 542 2:00 – 2:50 Tuesday & Thursday, OHE 540 12:00 – 12:50 Monday & Wednesday, OHE 540
Required Textbooks	*Computing Essentials 2008, Complete Edition* Timothy J. O'Leary, Linda I. O'Leary ISBN-10: 0073516708 ISBN-13: 9780073516707
Web Site	All course material will be on Blackboard at blackboard.usc.edu
Grading	Grading will be based on percentages earned in assignments and exams. Students will have structured labs throughout the semester, to be conducted during the scheduled lab time. The labs are designed to be completed in class, but can be completed outside of class. Labs 50% Midterm Exam 20% Final Exam 30% Total 100%

Labs	The labs will be posted incrementally on blackboard. The labs will appear under the "assignments" section, along with a link for electronic submission. Labs must be submitted using this link. Labs may not be submitted using the "digital dropbox". The lab due date will be posted along with the labs. There will be at least 5 labs assigned. Labs will be demonstrated in class by the instructor. A lab schedule will be posted during the first week of classes.
Grading Scale	The following is the grading scale to be used as a guide for the distribution of final grades at the end of the semester 93% and above A 90% – 93% A- 87% – 90% B+ 83% – 87% B 80% – 83% B- 77% – 80% C+ 73% - 77% C 70% – 73% C- 67% – 70% D+ 63% – 67% D Below 63% F
Policies	- Labs turned in after the deadline will automatically have 1 point deducted per day (24 hours) past the due date. Projects will not be accepted after 1 week beyond the project's deadline - No make-up exams (except for medical or family emergencies) will be offered nor will there be any changes made to the Final Exam schedule. - It is your responsibility to submit your lab on or before the due date. **It is not the responsibility of the lab assistant.** Do **not** turn in anything to your lab assistant! - All projects will be digitally submitted through blackboard except where specifically specified. Always keep a backup copy of your labs. - Students are free to attend any of the lab times offered. However, in the case of lab overcrowding, students assigned to that lab session have priority. - Lab attendance is not mandatory. However, there are some software packages that may not be available in non-ITP labs, or that may be different versions of the software detailed in the lab manual. The labs are designed to be completed by attending all of your lab sections before the lab due date. - You are required to have a USB portable drive (thumb drive, a USB hard drive, an iPod, etc.) You must keep a copy of all labs on this portable drive. They may be purchased at the USC Bookstore for a

	fee. You will not be able to save your work on the ITP lab computers.
Academic Integrity	The use of unauthorized material, communication with fellow students during an examination, attempting to benefit from the work of another student, and similar behavior that defeats the intent of an examination or other class work is unacceptable to the University. It is often difficult to distinguish between a culpable act and inadvertent behavior resulting from the nervous tension accompanying examinations. When the professor determines that a violation has occurred, appropriate action, as determined by the instructor, will be taken. Although working together is encouraged, all work claimed as yours must in fact be your own effort. Students who plagiarize the work of other students will receive zero points and possibly be referred to Student Judicial Affairs and Community Standards (SJACS). All students should read, understand, and abide by the University Student Conduct Code listed in SCampus, and available at: http://www.usc.edu/student-affairs/SJACS/nonacademicreview.html
Students with Disabilities	Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.
Open Labs	ITP will have open lab hours starting the second week of the semester. The open labs will not have a 101 lab assistant to assist with labs. These lab times are there in case you need extra time to complete a lab.

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Course Outline

Note: Schedule subject to change

Week 1 – Introduction to Information Technology
- Course overview
- Information Systems
- Software vs. Hardware
- Past, present, and future of IT

Reading: Chapter 1

Week 2 – Networking and the Internet
- History of the internet
- How the net works
- Chat programs
- Social networking
- E-commerce

Reading: Chapter 2

Week 3 – Application Software
- Office suites
- MS Office vs. everyone else ☺

Reading: Chapter 3

Week 4 – Other Software
- Graphics solutions
- Multimedia and web packages
- Artificial Intelligence?

Reading: Chapter 4

Week 5 – System Software
- Operating Systems
- Windows, Mac, and Linux
- Device interactivity

Reading: Chapter 5

Week 6 – Hardware
- Computer vs. Components
- Key computer components

Reading: Chapters 6 & 7

Week 7 – Secondary storage

- Hard disks
- Optical media
- Next generation media

Reading: Chapter 8

Week 8 – MIDTERM

Week 9 – Networking, part II

- Local networks vs. large corporate networks
- Networking technologies and protocols

Reading: Chapter 9

Week 10 – Security

- Privacy
- "I've been hacked?!?!?!"
- Hackers
- Computer Crimes

Reading: Chapter 10

Week 11 – Spreadsheets and Databases

- Spreadsheet overview
- What is a database
- Database Management Systems
- Types of DBs
- History of DBs

Reading: Chapter 12

Week 12 – Information Systems Management

- Information Flow
- Support Systems
- What is a TPS report?
- SAP and Enterprise Resource Planning (ERP) systems

Reading: Chapter 11

Week 13– System Analysis and Design

- System design phase chart
- Overview of the steps of system design

Reading: Chapter 13

Week 14 – Programming

- Elements of software design
- Object Oriented programming overview
- History of programming languages

Reading: Chapter 14

Week 15 – Conclusion

- Upcoming ideas and products
- New trends in IT
- Review for the final exam

Reading: Chapter 15

Final Exam

According to the schedule of classes, the final exam will be held on Wednesday, May 18th, from 2:00 – 4:00 PM, in KAP 160.