|                       | Introduction to   |
|-----------------------|---|
| UDU                   | Information Technology  |
| SCHOOL OF             | information recimology  |
| ENGINEERING           | ITP 101x (4 Units)  |
|                       |   |
|                       | Fall 2012   |
|                       |   |
| 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                              |
| Concents              | This course is designed to be an introductory course in information             |
| concepts              | 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           | None  |
| Instructor            | Tripa Gregory   |
| Contacting the        |   |
| Instructor            | trina.gregory@usc.edu   213-821-2642  |
| Office Hours          | Listed on Blackboard under Contacts and at                                      |
|                       | http://bcf.usc.edu/~trinagre/index.html#officehours                             |
| Office Location       | OHE 412   |
| Lecture               | 2:00 – 3:20 Monday & Wednesday  |
| Lab                   | 3.00 - 3.50 Monday & Wednesday  |
|                       | 2:00 – 2:50 Tuesday & Thursday  |
|                       | 3:00 – 3:50 Tuesday & Thursday  |
|                       | 4:00 – 4:50 Tuesday & Thursday  |
| Required<br>Textbooks | Instructor Handouts and Notes   |
| Website               | All course material will be on Blackboard ( <u>http://blackboard.usc.edu</u> ). |
|                       | Some information will be on my website ( <u>http://bcf.usc.edu/~trinagre</u> ). |
| Grading               | Grading will be based on percentages earned in assignments and exams.           |
|                       | conducted during the scheduled lab time. The labs are designed to be            |
|                       | completed in class, but can be completed outside of class.                      |
|                       | р   |
|                       | The Blog Project is a semester long project to be explained in the              |
|                       | beginning of the semester.  |
|                       | Labs 50%<br>Midtorm Exam 15%  |
|                       | Final Exam 30%  |
|                       | Blog Project 5%   |
|                       | Total 100%  |

| Labs                  | The labs will be posted incrementally on Blackboard. The labs will appear<br>under the "Assignments" section, along with a link for electronic<br>submission. Labs must be submitted using this link. The lab due date will<br>be posted along with the labs. There will be at least 5 labs assigned. Labs   |
|-----------------------|--|
| Grading Scale         | will be demonstrated in class by the instructor.<br>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 $90\% = 92\%$  |
|                       | 87% - 89% B+   |
|                       | 83% - 86% B  |
|                       | 77% - 79% C+   |
|                       | 73% - 76% C  |
|                       | 67% - 69% D+   |
|                       | 64% - 66% D  |
| 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.   |
|                       | <ul> <li>It is your responsibility to submit your lab on or before the due date.</li> <li>It is not the responsibility of the lab assistant. Do not turn in anything to your lab assistant!</li> </ul>   |
|                       | <ul> <li>All projects will be digitally submitted through Blackboard except<br/>where specifically specified. Always keep a backup copy of your labs.</li> </ul>   |
|                       | <ul> <li>Students are free to attend any of the lab times offered. However, in<br/>the case of lab overcrowding, students assigned to that lab session<br/>have priority.</li> </ul>   |
|                       | - 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.   |
|                       | <ul> <li>You are required to save your labs using a USB flash drive or a<br/>website such as http://www.dropbox.com. You must keep a copy of all<br/>labs. You will not be able to save your work on the ITP lab computers.<br/>You will be given one USB flash drive from ITP.</li> </ul>   |
| Academic<br>Integrity | The use of unauthorized material, communication with fellow students<br>during an examination, attempting to benefit from the work of another<br>student, and similar behavior that defeats the intent of an examination or<br>other class work is unacceptable to the University. It is often difficult to<br>distinguish between a culpable act and inadvertent behavior resulting<br>from the nervous tension accompanying examinations. When the<br>professor determines that a violation has occurred, appropriate action, as<br>determined by the instructor, will be taken. |

|               | Although working together is encouraged, all work claimed as yours must<br>in fact be your own effort. Students who plagiarize the work of other<br>students will receive zero points and possibly be referred to Student<br>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://web-app.usc.edu/scampus/university-student-conduct-code/  |
| Students with | Any student requesting academic accommodations based on a disability is  |
| Disabilities  | 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 onen 9.20 a m E.00 a m Monday through Eriday. The phone   |
|               | and is open 6.50 a.m 5.00 p.m., Monday unrough rhuay. 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.   |

# Introduction to Information Technology ITP 101x (4 Units)

# **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
- Week 2 Application Software
  - GUIs
  - Word Processors and Spreadsheets
  - Killer App
  - Microsoft Office Suite
  - Microsoft Office PowerPoint assignment
- Week 3 Numeral Systems and Graphics
  - Decimal, Binary and Hexadecimal
  - Computer Graphics
  - 3D Graphics
  - Virtual Reality
  - Image file types
  - Adobe Photoshop assignment
- Week 4 Internet and World Wide Web
  - Internet definition and history
  - Client / Server
  - Web Browsers
  - HTML and CSS
  - Web Hosting
- Week 5 Web Publishing
  - Web Server
  - WYSIWYG HTML Editor
  - Adobe Dreamweaver assignment

#### Week 6 - Networks

- Web Servers
- Adobe Dreamweaver assignment
- Network Hardware
- Protocols
- Topologies
- Microsoft Excel assignment
- Week 7 Hardware
  - Computer vs. Components
  - Key computer components
  - Microsoft Excel assignment
- Week 8 Operating Systems
  - Functions of Operating Systems
  - Windows, Mac, and Linux

#### Week 9 – Review for Midterm and Midterm

- Review for Midterm
- Midterm bring pencil
- Week 10 Secondary Storage
  - Hard disks
  - Optical media
  - Next generation media
- Week 11 Databases
  - Types of Databases
  - History of Databases
  - Database Management Systems
  - Microsoft Access assignment
- Week 12 Security and Forensics
  - Privacy
  - Hackers
  - Computer Crimes
  - Computer Forensics
- Week 13 Programming and ERP Systems
  - Software design cycle
  - Programming languages
  - Enterprise Resource Planning (ERP) systems
  - SAP

# Week 14 - Social Media

- Major types of websites
- Wikis
- Social networking
- Marketing
- Blog project

# Week 15 – Video Games and Conclusion

- Video Games
- New trends in IT
- Review for the final exam

## **Final Exam**

The final exam will be held according to the Schedule of Classes.