



ISAT 121 – Installing and Upgrading Computer Systems

Instructor: Andrew Aken

Office: College of Applied Sciences and Arts – ASA 117

Office Hours: Tuesday 9:00 am – 11:00 am
Wednesday 9:00 am – 1:00 pm

E-Mail: ajaken@siu.edu

Website: <http://siu.globaleyes.com/2008-Spring/ISAT121/>

Class Time: Section 2 T Th 11:00 am – 12:50 pm ASA 210/208

Course Description:

This course introduces students to the process of installing and upgrading personal computer systems. Topics include identification, selection, and installation of hardware, operating systems, peripherals, and basic networking. Introduction to basic electrical measurements and numbering systems are also included.

Prerequisites:

IST or EST major or consent of school

Required Textbooks:

N/A

Recommended Textbooks:

A+ Guide to Managing and Maintaining Your PC, Sixth Edition, Comprehensive (978-0-619-21758-7)

Objectives:

Upon successful completion of this course, the student should be able to:

1. Identify the major components of a computer system
2. Perform relevant basic electrical measurements
3. Understand and convert between binary, hexadecimal, and decimal numbering systems
4. Select, install, and configure computer systems and components
5. Select, install, and configure an operating system
6. Troubleshoot a computer system
7. Upgrade an existing computer system

Course Policies:

1. Class Attendance and Preparation Policy

Class preparation is strongly suggested. The instructor reserves the right to cancel any lecture when the majority of the class is unprepared or the attendance falls below 66% of the class enrollment. Course requirements will not be reduced to compensate for such cancellations. There will be many assignments and quizzes which must be completed during class time. Late submissions of these assignments will not be accepted without an excused absence.

2. Make-up Policy

Generally, students will be allowed to make-up missed exams if the absence is excused. All excused absences must be documented and approved **IN ADVANCE** (when applicable) and **IN WRITING** to the instructor.

3. Academic Dishonesty Policy

Any student who is found cheating during an examination or assists another student in cheating during an examination will automatically fail the course. The case will be forwarded to the appropriate individuals for university action. Any student caught cheating or helping a student cheat on any assignment will automatically receive a 0 on that assignment. Cheating includes, but is not limited to, crib sheets (unless approved by the instructor), copying answers from another student's exam, use of recording devices, submitting work that is not your own on individual assignments, and gaining unauthorized prior access to exams or answers.

4. Grade Appeals Policy

It is the student's responsibility to keep all graded materials that have been returned. The instructor's grades will be assumed to be accurate unless you can prove otherwise. Any student wishing to appeal a grade must submit a WRITTEN appeal indicating a complete explanation of why the student feels they deserve a different grade. Verbal grade appeals will not be accepted.

Course Grades

Lab assignments	There will be projects to be completed during class time. These projects must be completed on time and no late submissions will be accepted. You must attend all classes to ensure that you can complete these assignments.	Variable	20%
Take-home assignments	There will be 3 take-home assignments that must be completed prior to the beginning of class on the due date unless otherwise specified.	3	25%
Quizzes	There will be several quizzes throughout the semester. Most quizzes will be announced; some will be pop quizzes.	Variable	15%
Exams	There will be two exams (including the final) worth 200 points each. Specific dates will be announced at least one week in advance.	2	40%
			<hr/>
Total			100%

Grading Scale

> 90.0%	A
80.0–89.99%	B
70.0–79.99%	C
60.0–69.99%	D
<= 59.99%	F

Class Website

Once the student information has been entered into the class website, you will be able to access your grades and student-specific information, if applicable. Your logon ID will normally be your first initial concatenated to your last name in all lower case (e.g. aaken). Your initial password will be the same as your logon ID (this can be modified once you have logged in). If you experience any problems with accessing the class website, please notify me at ajaken@siu.edu.

Homework Submissions:

Take-home assignments are due prior to midnight on the specified due dates. Assignments that are turned in within 1 week of the due date will be docked 25% of the available points. Assignments turned in more than one week late, but prior to the last week of the semester will be docked 50% of the available points. All assignments must be presented in a professional manner (i.e. grammar/spelling, not hand-written, etc.). Do not procrastinate!!

For all electronic forms of Homework, you should upload them to the class' webserver.

Topic Outline (tentative):

- I. Numbering systems
 - II. Overview of PC Hardware
 - III. Form Factors and Power Supplies
 - IV. Electricity and Multimeters
 - V. PC Repair Fundamentals
 - VI. Motherboards
 - VII. Processors and Chipsets
 - VIII. Memory
 - IX. Hard Drives
 - X. Multimedia Devices and Mass Storage
 - XI. Installing and Supporting I/O Devices
 - XII. Operating Systems
 - XIII. Installing Windows 2000/XP
 - XIV. Maintaining Windows 2000/XP
 - XV. Supporting Windows 2000/XP Users and Their Data
- The following items will be covered as time allows*
- XVI. Data Communications
 - XVII. The Internet
 - XVIII. Professionalism

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIU-C Emergency Response Plan and Building Emergency Response Team (BERT) programs. Emergency response information is available on posters in buildings on campus, available on the BERT website at www.bert.siu.edu, Department of Public Safety's website at www.dps.siu.edu (disaster drop down) and in Emergency Response Guidelines pamphlets. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. **It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency.** The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.