Course Description

Most organizations use computer hardware and software extensively in day to day operations. This course provides an introduction to IT infrastructure issues for students majoring in Information Systems. It covers topics related to both computer and systems architecture and communication networks, with an overall focus on the services and capabilities that IT infrastructure solutions enable in an organizational context. It gives the students the knowledge and skills that they need for communicating effectively with professionals whose special focus is on hardware and systems software technology and for designing organizational processes and software solutions that require in-depth understanding of the IT infrastructure capabilities and limitations.

MIS 2749 (Introduction to Business Microcomputer Applications) and MIS 2755 (Introduction to Management Information Systems) are prerequisites for this class.

Planned topics include:
- Basics of computing
- Hardware
  - Processor architecture and operation
  - Data storage
  - Input/Output technology
  - Networking and data communication
- Software
  - Operating systems
  - Application development
  - Distributed applications
  - System administration

Course Objectives

Upon completion of this class, you should be able to:
- Understand and explain general computer hardware and software concepts
- Utilize critical thinking skills to discuss current trends and advances in computer hardware and software
- Understand key principles of data representation and manipulation in computing solutions.
- Understand the differences and similarities between the core elements of an IT infrastructure solution, such as clients, servers, network devices, wired and wireless network links, systems software, and specialized security devices.
- Understand through practical examples how protocols are used to enable communication between computing devices connected to each other.
- Understand the role and structure of the Internet as an IT infrastructure component and to design simple infrastructure solutions based on the use of the Internet.
Course Website

Course materials are available online by logging into eCourseware.memphis.edu. Course materials include lecture slides, in-class exercises, grades, and related links.

Required Textbook

June Parsons, Dan Oja
Publisher: Course Technology

Grading Policy

Class performance will be based on participation, assignments, tests, and a term project. Class performance will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent of final grade</th>
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</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>15%</td>
</tr>
<tr>
<td>Online Class Discussions</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 1</td>
<td>20%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>20%</td>
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<tr>
<td>Exam 3</td>
<td>20%</td>
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<tr>
<td>*Optional Comprehensive Final</td>
<td></td>
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<tr>
<td>(May 3, 7 pm)</td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>10%</td>
</tr>
<tr>
<td>Do Some Good / Have Some Fun</td>
<td>2% Extra Credit</td>
</tr>
</tbody>
</table>

Grades will be assigned using the following percentages:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percent</th>
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<tbody>
<tr>
<td>A</td>
<td>90% and above</td>
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<tr>
<td>B</td>
<td>80% to 89%</td>
</tr>
<tr>
<td>C</td>
<td>70% to 79%</td>
</tr>
<tr>
<td>D</td>
<td>60% to 69%</td>
</tr>
<tr>
<td>E</td>
<td>Below 60%</td>
</tr>
</tbody>
</table>

Assignments and Labs (15%)

There will be 4 (relatively small) assignments during the semester. Each assignment should take 1-2 hours. Each graded assignments will be given 0, 5, 7.5, or 10 points. Assignments are to be done individually. Feel free to discuss general concepts with each other. However, the specifics of the assignment should not be discussed. Assignments allow me to evaluate your understanding of the concepts we discuss.

Also, during the course of the semester we will be doing 3 labs (worth 10 pts each for a total of 30 pts). Labs will be conducted in class, but the accompanying assignments will be submitted to the course website after class.

There may be other assignments as we get into the semester. These will be discussed in class and a schedule will be posted on eCourseware.
**Online Class Discussion (15%)**

There will be 4 topics that we will discuss online as a class. Each one of these topics will have a related article or video that you will first read/watch and each topic has 2-3 discussion questions that will be posted to start the discussion. In addition to contributing ideas to the discussion, you will also rate your peers’ comments and tag them in meaningful ways.

For each topic you will turn in a summary (on the discussion board) of the most relevant and impactful ideas after we have discussed the topic online. Your contribution to the class discussion and also your summary will be graded. Each topic is worth 10 points for a total of 40 points. However, the overall category is worth 15% toward your final grade.

**Tests**

There are three tests during the semester and an optional comprehensive final.

Test 1 will cover chapters 1-3 and chapter 8, test 2 will cover chapters 5-7, and test 3 will cover chapters 4,9,10 and 12 (see schedule for more details).

An optional comprehensive final will be offered. This exam can replace a lower exam score if performance exceeds any of the other three exams.

Exams will be taken in class. Due to the nature of the material covered in this class, exams will primarily consist of multiple choice, fill in the blank, and short answer questions. Additionally, each test will contain two to three essay questions.

Please see the schedule for the dates of the exams. No makeup exams will be given.

**Participation**

Participation will be evaluated using the following (rough) categories:

- **Good** – (7% - 10% of final grade)
  - Attends class; participates in class discussions; asks meaningful questions
- **Fair** – (4% – 6% of final grade)
  - Attends class, but rarely participates in class discussions or is distracted during class with other material
- **Poor** – (below 4% of final grade)
  - Attendance is spotty; mixed participation

You are expected to attend all classes and participate in class discussions/exercises. Class attendance can affect participation points. You are responsible for the material we cover in class. If you do have a legitimate reason for missing class, if possible, please notify me before class. Lecture slides will be posted on the class website, however, you are responsible for acquiring any other notes from classmates. Please note that office hours are not a substitute for class attendance.

**Do Some Good / Have Some Fun**

Your University experience should be more than just going to class and taking tests. It should help prepare you to give back to society. Thus, the following two extra credit assignments are to help promote well-roundedness in your University experience this semester:

Do Some Good – Do something helpful for someone else that is not part of your routine. Submit 1-2 paragraphs about it on the course website.
Have Some Fun – Take some time during this semester to do something fun that you would really like to do but haven’t set aside time for. It doesn’t need to take a lot of time or cost a lot of money, but should be something that is not part of your routine. Submit 1-2 paragraphs about it on the course website.

**Disabilities**

Any student who may need class or test accommodations based on the impact of a disability is encouraged to speak with me privately to discuss your specific needs. Students with disabilities should also contact Student Disability Services (SDS) at 110 Wilder Tower, 678-2880. SDS coordinates reasonable accommodations for students with documented disabilities.

**Academic Integrity and Student Conduct**

It is assumed that you will display academic integrity in this class. Expectations for academic integrity and student conduct are described in detail on the website of the Office of Student Judicial and Ethical Affairs (http://saweb.memphis.edu/judicialaffairs/). Any violations of these expectations are taken seriously. If you have any question about the code of conduct or what constitutes a violation of it, please contact me.