CSC150: FOUNDATIONS OF COMPUTER SCIENCE

Course Overview: This course has three components: Theory, Practice and Application.

Theory deals with computer concepts. Techniques of high level to machine language translation will be studied with an emphasis on: what it is, how it works, and why it is used.

Practice deals with computer system use and there will be hands on exposure to a number of applications that will be used in assignment sessions.

Application deals with putting concepts to use in order to solve problems. A typical problem will be presented and an acceptable solution will be generated for homework assignments.

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Tests</td>
<td>29%</td>
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<tr>
<td>Assignments</td>
<td>42%</td>
</tr>
<tr>
<td>Term project</td>
<td>10%</td>
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<tr>
<td>Final exam</td>
<td>19%</td>
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Assignments:

Project – The final project is an application of computer skills to a real life problem. This project will sharpen student communication and problem solving skills.

Tests – Tests are true/false, multiple choice and short answer.

Quizzes – Quizzes will be taken online via blackboard learn.

Readings – It is expected that you will read and understand text chapters before class discussion.

Attendance is recorded for each discussion or assignment that is submitted. Students are encouraged to log on about 4 times per week and dedicate about 6 hours each week to their coursework.

Assignments – Some assignments require installing a program to your laptop or computer.

Discussion – Class discussion is based upon the text material, but always goes far beyond what is covered in the text.

15 week course
Not self-paced; assignments
Have weekly deadlines.

Students can access their course any time, from any location.
A laptop or desktop is required and the ability to download software to install.

Students will set up a university email & use this while in the course.
Orientation will be required prior to the start of the course.
<table>
<thead>
<tr>
<th>Week</th>
<th>Readings</th>
<th>Graded Assignments</th>
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| 1    | Introductory Materials  
The Syllabus  
Chap 0: Introduction | Initial Quiz: Due Sunday  
Assignment 1: Operating System Due Sun  
Discussion: Post by Wed, Reply by Sunday |

**Unit 1 Overview**

| 2    | Chap 1 - Introduction to Computer Science  
Chap 2 - A Computing Environment  
Chap 3 - Introduction to Computer Systems  
Optional: Plus IT Assignment 2A, 2B | Assignment 2: Ad Review  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply by Sun |

| 3    | Chap 4 – Grand Ideas  
Chap 6 – Origin of Comp. Science  
Optional: Plus IT Assignment 3A, 3B | Assignment 3: Easter Algorithm  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply Sun |

| 4    | Chap 7 – Word Processing  
Chap 8 – Information Processing 1  
Chap 9 – Information Processing 2  
Optional: Plus IT Assignment 4A, 4B | Assignment 4: Document Tables  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply by Sun |

| 5    | Exam review reading | **Exam #1: Due Sunday**  
Discussion: Post by Wed, Reply by Sun |

**Unit 2 User’s View**

| 6    | Chap 10 – Human Computer Interaction 1  
Chap 11 – Human Computer Interaction 2  
Chap 12 – Graphics and Presentations  
Optional: Plus IT Assignment 6A, 6B | Assignment 6: Presentation Graphics  
(POWERPOINT)  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply by Sun |

| 7    | Chap 13 – Human Computer Interaction 3  
Chap 14 – Application Packages 1  
Chap 15 – Spreadsheets  
Optional: Plus IT Assignment 7A, 7B | Assignment 7: Spreadsheet  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply by Sun |

| 8    | Chap 16 – Application Packages 2  
Chap 17 – Computer System Errors  
Chap 18 – Data Communications | Assignment 8: Website Creation  
Quiz: Due Sunday  
Discussion: Post by Wed, Reply by Sun |

| 9    | Chap 19 – Data Communications 2  
Complete note sheets for readings | Practice Exam:  
**Exam #2: Due Sunday**  
Discussion: Post by Wed, Reply by Sun |

**Unit 3 Functional View**

| 10   | Chap 22 – Algorithms  
Chap 23 – Processor Architecture 1  
Chap 24 – Processor Architecture 2  
Optional: Plus IT Assignment 10A, 10B | Discussion: Post by Wed, Reply by Sun |

| 11   | Chap 25 – Programming Process  
Chap 26 – C++ Programming Lab  
Chap 27 – Programming Languages | Assignment 11: C++ Coding  
Discussion: Post by Wed, Reply by Sun |

| 12   | Chap 28 – Systems Software 1  
Chap 29 – Systems Software 2  
Chap 30 – Storage Management Issues 1 | Assignment 12: Spreadsheet Analytics  
Discussion: Post by Wed, Reply by Sun |

| 13   | Chap 31 – Storage Management Issues 2 | **Exam #3: Due Sunday**  
Discussion: Post by Wed, Reply by Sun |

**Unit 4 Foundational View**

| 14   | Chap 34 – Foundations of Computer Science  
Chap 35 – Foundations Hardware  
Chap 37 – Foundations Software | Term Project: Due Friday  
Discussion: Post by Wed, Reply by Sun |

| 15   | Chap 39 – Foundations People  
Chap 40 – Information, Intelligence, Meaning | Assignment 15: Open Office Spreadsheet  
Final Exam: Due Friday  
Discussion: Post by Wed, Reply by Sun |

This is a sample course schedule and the actual course layout could change each term.