CSI 400/500 Spring 2008
Prof Robert Ekblaw

Course Syllabus

Lecture: Mondays and Wednesdays, 7:15-8:35PM, Education Rm 120
Lab: Tuesdays or Thursdays, 7:15-8:10PM, Library 99

Office: Library 95J
Hours: Mondays and Wednesdays, 6-7PM and 8:45-9:45PM
        Saturdays by appointment
Email: raekblaw@cs.ualbany.edu

TA: Lance Latham
Email: scdtl@yahoo.com
Office: Library 99 (Computer Science Laboratory)
Hours: Mondays and Wednesdays, 10AM - noon


Course Schedule:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Text</th>
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<tbody>
<tr>
<td>1/23</td>
<td>Course Introduction, Strategies</td>
<td>Chapter 1</td>
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<tr>
<td>1/28</td>
<td>Parts of a Computer, Parts of an Operating System, Functions of an Operating System</td>
<td>3.1, 3.2, 4.1 – 4.5</td>
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<tr>
<td>1/30</td>
<td>Processes</td>
<td>2.1 – 2.3, 6.1 – 6.4</td>
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<tr>
<td>2/4</td>
<td>Using Processes, Threads, and Kernels</td>
<td>3.3, 6.5, 6.7</td>
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<tr>
<td>2/6</td>
<td>Designing Methods</td>
<td>6.6 + handout</td>
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<tr>
<td>2/11</td>
<td>Process Scheduling</td>
<td>6.8, 7.1 – 7.4</td>
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<tr>
<td>2/13</td>
<td>Scheduling, cont + Programming Hints and Standards</td>
<td>7.5, 7.6 + handout</td>
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<tr>
<td>2/20</td>
<td>Memory Management</td>
<td>11.1 – 11.3</td>
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<td>2/25</td>
<td>Memory Strategies and Dynamic Memory</td>
<td>11.4, 11.5 + handout</td>
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<tr>
<td>2/27</td>
<td>Files, Directories and Folders</td>
<td>13.1 – 13.5</td>
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<tr>
<td>3/3</td>
<td>File Systems and Memory Mapping</td>
<td>13.6, 13.7, 12.7</td>
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<tr>
<td>3/5</td>
<td>Virtual Memory</td>
<td>12.1 – 12.6</td>
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<td>3/10</td>
<td>Input/Output and review for Midterm</td>
<td>5.1, 5.2</td>
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<tr>
<td>3/12</td>
<td>MIDTERM</td>
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<td>3/17</td>
<td>Device Management</td>
<td>5.3 – 5.5</td>
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<td>3/19</td>
<td>Synchronization: Semaphores</td>
<td>Chpt 8</td>
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<td>3/31</td>
<td>Synchronization: Monitors</td>
<td>Chpt 9</td>
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<td>4/2</td>
<td>Deadlock and Prevention</td>
<td>Chpt 10</td>
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<tr>
<td>4/7</td>
<td>Networks: Protocols and Layers</td>
<td>15.3 – 15.7</td>
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<td>4/9</td>
<td>Remote Files</td>
<td>Chpt 16</td>
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<td>4/14</td>
<td>Viruses and Intrusion</td>
<td>Chpt 14 + 15.7</td>
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<td>4/16</td>
<td>Computer Security</td>
<td>Chpt 19 + 4.8</td>
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<td>4/21</td>
<td>Designing an Operating System</td>
<td>Chpt 17</td>
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<td>4/23</td>
<td>Concurrency</td>
<td>2.4, 8.4</td>
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<td>4/28</td>
<td>Distributed Operating Systems</td>
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<td>4/30</td>
<td>Distributed Programming</td>
<td>18.3 – 18.5</td>
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<tr>
<td>5/5</td>
<td>Review for Final</td>
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Homework
There will be four assignments requiring individual effort and one group project. The group project will have three different deadlines, each deadline requiring some form of output to be turned in. Not all assignments will be programming assignments. Different assignments will require different items to turn in. Each assignment will list and briefly describe the items to turn in.

Exams
There will be a Midterm and Final exam. The Final Exam will be comprehensive, although more emphasis will be placed on the topics in the second half of the course.

Grading Criteria
This is a merit course. That means you receive the grade you earned. There is no grading “on a curve”. That means it is possible for everyone to achieve an A, or nobody. Grading of assignments is based upon completeness (turning in everything requested), comprehensiveness (demonstrating a working knowledge of the subject matter covered by the assignment), and timeliness. You will lose five points for each day an assignment is late. Assignments are due by 11PM on the date specified for that assignment. Receiving an assignment at 11:01 PM constitutes a day late.

Extra Credit
Extra credit is arranged ONLY with prior discussion with the professor. If you choose to do extra effort on an assignment, that effort will not be graded unless previously approved by the professor. Extra credit is not an expected part of this course – extra credit will only be offered under extreme or unusual circumstances.

Originality
You are expected to do your own work in this course. I have an extensive library of previous assignments. If any student turns in a copy of someone else’s work, from either this semester or a previous one, that student will receive a 0 for that assignment. THERE ARE NO EXCEPTIONS TO THIS POLICY!!!

Final Grade
Your final grade will be determined by weighing the following graded material:

<table>
<thead>
<tr>
<th></th>
<th>Homework</th>
<th>Group Project</th>
<th>Midterm</th>
<th>Final Exam</th>
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<tbody>
<tr>
<td></td>
<td>20%</td>
<td>30%</td>
<td>20%</td>
<td>30%</td>
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Letter Grades
Grades for each assignment, test, and final grade will be determined using the following matrix: (N/A means that grade is not available. There is only one failing grade - F)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
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<tbody>
<tr>
<td>+</td>
<td>100</td>
<td>87-90</td>
<td>76-79</td>
<td>67-69</td>
<td>N/A</td>
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<tr>
<td></td>
<td>95-99</td>
<td>83-86</td>
<td>73-75</td>
<td>63-66</td>
<td>0-59</td>
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<tr>
<td>-</td>
<td>91-94</td>
<td>80-82</td>
<td>70-72</td>
<td>60-62</td>
<td>N/A</td>
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