<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
<th>Labs</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/30</td>
<td>Syllabus and Review: Linux, C, x86</td>
<td>No labs this week</td>
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<tr>
<td>9/3</td>
<td><strong>Reverse Engineering</strong>: Memory layouts, CFGs, tools</td>
<td></td>
<td>Syllabus&lt;br&gt;Lecture_Introduction</td>
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<td></td>
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<td></td>
<td>Lecture_WarGames_Chapter2</td>
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<tr>
<td>9/10</td>
<td>No lecture, Tuesday follows Monday schedule</td>
<td>9/10: Lab Chapter 2</td>
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<td></td>
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<td>Ch. 2 C-level due</td>
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<tr>
<td>9/14,</td>
<td><strong>Ch. 2 B- &amp; A-level due Noon Intro to Memory Corruption</strong>: ELF, the stack, calling conventions, buffer overflows</td>
<td>9/17: Lab Chapter 3</td>
<td>Lecture_WarGames_Chapter3</td>
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<tr>
<td>9/17</td>
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<td>Ch. 3 C-level due</td>
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<tr>
<td>9/21,</td>
<td><strong>Ch. 3 B- &amp; A-level due Noon Shellcoding</strong>: Writing shellcode, developing scenario relevant payloads</td>
<td>9/24: Lab Chapter 4</td>
<td>Lecture_WarGames_Chapter4</td>
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<td>9/24</td>
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<td>Ch. 4 C-level due</td>
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<tr>
<td>9/28,</td>
<td><strong>Ch. 4 B- &amp; A-level due Noon Stack Cookies</strong>: Mitigation against overflows, techniques for getting around stack cookies</td>
<td>10/1: Lab Chapter 5</td>
<td>Lecture_WarGames_Chapter5</td>
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<td>10/1</td>
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<td>Ch. 5 C-level due</td>
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<tr>
<td>10/5,</td>
<td><strong>Ch. 5 B- &amp; A-level due Noon DEP and ROP</strong>: Data execution prevention, writing ROP, ret2libc</td>
<td>10/8: Lab Chapter 6</td>
<td>Lecture_WarGames_Chapter6</td>
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<td>10/8</td>
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<td>Ch. 6 C-level due</td>
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<tr>
<td>10/12,</td>
<td><strong>Ch. 6 B- &amp; A-level due Noon ASLR and Memory Leaks</strong>: Overview, info leaks, partial overwrites, ASLR closure</td>
<td>10/15: Lab Chapter 7</td>
<td>Lecture_WarGames_Chapter7</td>
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<tr>
<td>10/15</td>
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<td>Ch. 7 C-level due</td>
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<tr>
<td>10/19,</td>
<td>**Ch. 7 B- &amp; A-level due Noon Topics in MBE (Ghidra), Intro to Project 1</td>
<td>10/22: Lab Project 1</td>
<td>Lecture_Tools</td>
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<td>10/22</td>
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<tr>
<td>10/26,</td>
<td>Ghidra</td>
<td>10/29: Lab Project 1</td>
<td>Lecture_Tools_Part2</td>
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<tr>
<td>10/29</td>
<td>Catch-up Chapters 3-7</td>
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<tr>
<td>Date(s)</td>
<td>Topic</td>
<td>Due Date/s</td>
<td>Resources</td>
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<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
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<td>11/2, 11/5</td>
<td><strong>Heap Exploitation:</strong> Heap structure and concepts, corruption, use after free</td>
<td>11/05: Lab Chapter 8 Ch. 8 C-level due</td>
<td><a href="#">Lecture WarGames Chapter8</a></td>
</tr>
<tr>
<td>11/9, 11/12</td>
<td><strong>Miscellaneous Issues:</strong> Uninitialized memory, signed/unsignedness, side channels</td>
<td>11/12: Lab Chapter 9 Ch. 9 C-level due</td>
<td><a href="#">Lecture WarGames Chapter9</a></td>
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<tr>
<td>11/16, 11/19</td>
<td><strong>Race Conditions:</strong> Introduction to process timing, pipelining</td>
<td>11/19: Lab Chapter 10 Ch. 10 C-level due</td>
<td><a href="#">Lecture WarGames Chapter10</a></td>
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<tr>
<td>11/23</td>
<td><strong>Catch-up Chapters 8-10, Intro to Project 2</strong></td>
<td>Thanksgiving Week, No lab</td>
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<tr>
<td>11/30, 12/3</td>
<td><strong>Topics in MBE (Program Analysis)</strong></td>
<td>11/21: Lab Project 2</td>
<td><a href="#">Lecture ProgramAnalysis</a></td>
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<tr>
<td>12/7, 12/10</td>
<td><strong>Topics in MBE: Ethics</strong></td>
<td>12/5: Lab Project 2 Project 2 Due</td>
<td><a href="#">Lecture Ethics</a></td>
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