**SYLLABUS**

(Classes and discussions listed; labs always follow classes)

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
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<tbody>
<tr>
<td></td>
<td>Week # 1</td>
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<tr>
<td>9/5</td>
<td>Holiday; No class</td>
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<tr>
<td>9/7</td>
<td>Class 1: Introduction to EK 125; Introduction to MATLAB, Characters, Relational expressions (M Chapter 1)</td>
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<tr>
<td>9/9</td>
<td>Discussion 1: Problem solving techniques; Quiz Formats; Practice Quiz</td>
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<td>Week # 2</td>
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<tr>
<td>9/12</td>
<td>Class 2: Vectors, Matrices (M Chapter 2A: Sec 2.1-2.4)</td>
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<td>9/14</td>
<td>Class 3: Matrix Ops, Intro to Programming, Scripts, I/O (M 2B: Sec 2.5, 3A: Sec 3.1-3.4)</td>
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<tr>
<td>9/16</td>
<td>Discussion 2: Quiz 1</td>
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<td>Week # 3</td>
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<td>9/19</td>
<td>Class 4: Plots, File I/O Functions, Programs, Commands (M 3B: Sec 3.5-3.10)</td>
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<td>9/19</td>
<td>Last day to add a course</td>
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<tr>
<td>9/21</td>
<td>Class 5: If statements, Relational expressions; switch statements; “is” functions (M Chap 4)</td>
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<td>9/23</td>
<td>Discussion 3: Quiz 2</td>
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<td>Week # 4</td>
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<td>9/26</td>
<td>Class 6: Loops: for, nested (M5A: Sec 5.1-5.2); <strong>HW 1 Due</strong></td>
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<td>9/28</td>
<td>Class 7: Exam Review</td>
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<tr>
<td>9/30</td>
<td>Discussion 4: Exam Review</td>
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<td><strong>9/30</strong></td>
<td>*** EXAM # 1 4:30 – 6:00 pm</td>
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**Week # 5**

10/3  Class 8: Loops: while, error-checking; Vectorizing, Timing Code (M 5B: Sec 5.3 - 5.5);

10/5  Class 9: User-defined functions, MATLAB program organization, Scope, Persistent variables, Debugging, Live scripts (M Chapter 6)

10/7  Discussion 5: Quiz 3

**Week # 6**

10/10  Holiday; No Classes

10/11  *Monday Schedule at BU*: Class 10: Text Manipulation (M Chapter 7);
       **HW 2 Due**

10/11  *Last day to drop a course (without a “W”)*

10/12  Class 11: Advanced data structures (M Chap 8A: Sec 8.1-8.3, also DS/ML Supplement)

10/14  Discussion 6: Quiz 4

**Week # 7**

10/17  Class 12: Data Transfer (M Chap 9)

10/19  Class 13: Advanced functions: variable # of arguments, Validating Function arguments, anonymous functions (M Chap 10A: Sec 10.1-10.3 also DS/ML Supplement)

10/21  Discussion 7: Quiz 5

**Week # 8**

10/24  Class 14: Sets, Intro to Machine Learning (M 14A: Sec 14.1, Chapter 15 including all DS/ML supplements; **HW 3 Due**

10/26  Class 15: Exam Review

10/28  Discussion 8: Exam Review

**10/28  *** EXAM # 2  4:30 – 6:15 pm***
Week # 9
10/31  Class 16: Command Line Interfaces; Intro to C (C Chapter 1)
11/2   Class 17: Selection Statements and Loops (C Chapter 2)
11/4   Discussion 9: Quiz 6

Week # 10
11/7   Class 18: Data Structures: Arrays, Strings, and Structures (C Chapter 3);
       **HW 4 Due**
11/9   Class 19: Introduction to Functions and Program Organization in C (C
       4A: Sec 4.1-4.6)
11/11  Discussion 10: Quiz 7

Week # 11
11/14  Class 20: Pointers, Call-by-reference (C 4B: Sec 4.7); **Project Proposal
       Due**
11/14  Last day to drop a course (with a “W”)
11/16  Class 21: Dynamic Memory Allocation (C 5A: Sec 5.1)
11/18  Discussion 11: Quiz 8

Week # 12
11/21  Class 22: Introduction to Linked Lists (C 5B: Sec 5.2.1-5.2.3)
11/23-11/27 Holiday; Thanksgiving Recess

Week # 13
11/28  Class 23: Common Operations on Linked Lists (C 5C: Sec 5.2.4 – 5.2.5)
11/30  Class 24: Exam Review
12/1   Discussion 12: Exam Review
12/1   ***** EXAM # 3  4:30 – 6:15pm

Week # 14
12/5   Class/Lab 25: Project Presentations
12/7   Class 26: What’s Next; Course Evaluations
12/9   *No Discussions*

Week # 15
12/12  Last Day of Classes; No EK 125; **Project Due**