ME 1020: ENGINEERING PROGRAMMING WITH MATLAB

Instructor: Professor Scott K. Thomas, Ph.D., (937) 775-5142, Room 124 Russ Engineering Center
scott.thomas@wright.edu

Course Homepage: http://cecs.wright.edu/people/faculty/sthomas/matlab.html

Class Hours: T Th 5:00 p.m. to 6:20 p.m., Room 005 Student Success Center

Office Hours: T Th 3:45 p.m. to 4:45 p.m., or by appointment, Room 124 Russ Engineering Center


Pre-Lecture Quizzes: It is expected that students will read and study the textbook prior to starting a new chapter. Pre-Lecture Quizzes will be given on the Pilot website, which are due prior to class as indicated in the Course Schedule below. Late quizzes will not be accepted by the Dropbox feature within Pilot or by the instructor. Go to Pilot/Assessment/Quizzes and Exams to take the quizzes.

Pilot Website: https://pilot.wright.edu/login.asp

Homework Assignments: Use the Homework Handouts for the Homework Assignments, which are due as indicated in the Course Schedule below. Each homework assignment will be submitted as a single PDF file using the Dropbox feature within Pilot. Homework assignments submitted in any other format will not be accepted and will be given a grade of zero. Late homework assignments will not be accepted by the Dropbox feature within Pilot or by the instructor.

Homework Handouts: http://cecs.wright.edu/people/faculty/sthomas/matlabhandouts.html

Homework Solutions: http://cecs.wright.edu/people/faculty/sthomas/matlabhomeworksolutions.html

In-Class Assignments: Students are encouraged to attend every class period. In-class assignments will reward students who attend and participate in class. Each in-class assignment will be submitted as a single PDF file using the Dropbox feature within Pilot at the end of the class period. Late in-class assignments will not be accepted by the Dropbox feature within Pilot or by the instructor.

Mid-Term Exams: Mid-term exams are scheduled as indicated in the Course Schedule below. Mid-term exams will not be rescheduled for any individual for any reason. If you miss an exam, the weight of that exam will be placed onto the final exam. If you take a mid-term exam, you can choose to not have it graded by not submitting it to the instructor for grading. If your exam is not graded, the weight of that exam will be placed onto the final exam. If your exam is graded, you will receive the grade for that exam.

Final Exam: The final exam is scheduled as indicated in the Course Schedule below. The final exam will not be rescheduled for any individual for any reason. If you miss the final exam, you will receive a FAILING GRADE for the class.
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Items that ARE allowed during exams:
- Bound textbook
- Calculator that does not have electronic communication capabilities
- Instructor-supplied paper
- Pencil
- Eraser
- MATLAB programming environment (including the Help environment)

Items that ARE NOT allowed during exams:
- Cell phones or other electronic communication devices or methods (e-mail, instant messaging, etc.)
- Web browser open
- The electronic version of the book
- Photocopies of the bound textbook
- Print-outs of the electronic version of the book
- Extra sheets of paper of any kind

Student Conduct During Exams:
- If you have a cellphone or other electronic communication device out during a mid-term exam, or a web browser open, you will receive a ZERO FOR THE MID-TERM EXAM.
- If you decide to share your work with someone else during a mid-term exam, both people will receive ZEROES FOR THE MID-TERM EXAM.
- If you have a cellphone or other electronic communication device out during the final exam, or a web browser open, YOU WILL RECEIVE A FAILING GRADE FOR THE CLASS.
- If you decide to share your work with someone else during the final exam, BOTH PEOPLE WILL RECEIVE A FAILING GRADE FOR THE CLASS.

Each type of incident outlined above will be referred to the Office of Community Standards and Student Conduct as a case of academic dishonesty.

Academic Integrity Standards:
http://www.wright.edu/community-standards-and-student-conduct/code-of-student-conduct/academic-integrity

Course Grade: 5% Pre-Lecture Quizzes, 5% In-Class Assignments, 10% Problem Sets, 60% Mid-Term Exams, 20% Final Exam.

A: 100 to 90, B: 89 to 80, C: 79 to 70, D: 69 to 60, F: < 60
# ME 1020: ENGINEERING PROGRAMMING WITH MATLAB

## Course Schedule:

<table>
<thead>
<tr>
<th>Class Period</th>
<th>Date</th>
<th>Subject</th>
<th>Chapter</th>
<th>Pre-Lecture Quiz Due Date</th>
<th>Homework Due Date</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>8/29</td>
<td>Overview of MATLAB</td>
<td>1</td>
<td>Chapter 1</td>
<td></td>
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<tr>
<td>2</td>
<td>8/31</td>
<td>Overview of MATLAB</td>
<td>1</td>
<td></td>
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<tr>
<td>3</td>
<td>9/5</td>
<td>Numeric, Cell and Structure Arrays</td>
<td>2</td>
<td>Chapter 2</td>
<td>Chapter 1</td>
</tr>
<tr>
<td>4</td>
<td>9/7</td>
<td>Numeric, Cell and Structure Arrays</td>
<td>2</td>
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<tr>
<td>5</td>
<td>9/12</td>
<td>Functions and Files</td>
<td>3</td>
<td>Chapter 3</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>6</td>
<td>9/14</td>
<td>Functions and Files</td>
<td>3</td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>9/19</td>
<td><strong>Mid-Term Exam 1</strong></td>
<td>1,2,3</td>
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<td>Chapter 3</td>
</tr>
<tr>
<td>8</td>
<td>9/21</td>
<td>Programming with MATLAB</td>
<td>4a</td>
<td>Chapter 4</td>
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</tr>
<tr>
<td>9</td>
<td>9/26</td>
<td>Programming with MATLAB</td>
<td>4a</td>
<td></td>
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<tr>
<td>10</td>
<td>9/28</td>
<td>Programming with MATLAB</td>
<td>4b</td>
<td>Chapter 4a</td>
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<tr>
<td>11</td>
<td>10/3</td>
<td>Programming with MATLAB</td>
<td>4b</td>
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<tr>
<td>12</td>
<td>10/5</td>
<td>Advanced Plotting</td>
<td>5</td>
<td>Chapter 5</td>
<td>Chapter 4b</td>
</tr>
<tr>
<td>13</td>
<td>10/10</td>
<td>Advanced Plotting</td>
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<tr>
<td>14</td>
<td>10/12</td>
<td><strong>Mid-Term Exam 2</strong></td>
<td>4,5</td>
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<td>Chapter 5</td>
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<tr>
<td>15</td>
<td>10/17</td>
<td>Model Building and Regression</td>
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<td>Chapter 6</td>
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<td>Model Building and Regression</td>
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<tr>
<td>17</td>
<td>10/24</td>
<td>Statistics, Probability, and Interpolation</td>
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<td>Chapter 7</td>
<td>Chapter 6</td>
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<td>18</td>
<td>10/26</td>
<td>Statistics, Probability, and Interpolation</td>
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<tr>
<td>19</td>
<td>10/31</td>
<td>Linear Algebraic Equations</td>
<td>8</td>
<td>Chapter 8</td>
<td>Chapter 7</td>
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<tr>
<td>20</td>
<td>11/2</td>
<td>Linear Algebraic Equations</td>
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<td>21</td>
<td>11/7</td>
<td><strong>Mid-Term Exam 3</strong></td>
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<td>Chapter 8</td>
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<td>22</td>
<td>11/9</td>
<td>Numerical Methods for Calc and Diff Eqns</td>
<td>9a</td>
<td>Chapter 9</td>
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<tr>
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<td>Numerical Methods for Calc and Diff Eqns</td>
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<td>Chapter 9a</td>
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<tr>
<td>25</td>
<td>11/21</td>
<td>Numerical Methods for Calc and Diff Eqns</td>
<td>9b</td>
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<tr>
<td>26</td>
<td>11/23</td>
<td><strong>Thanksgiving Holiday: No Class</strong></td>
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<tr>
<td>27</td>
<td>11/28</td>
<td>Numerical Methods for Calc and Diff Eqns</td>
<td>9c</td>
<td>Chapter 9b</td>
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<tr>
<td>28</td>
<td>11/30</td>
<td>Numerical Methods for Calc and Diff Eqns</td>
<td>9c</td>
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<tr>
<td>29</td>
<td>12/5</td>
<td>Simulink</td>
<td>10</td>
<td>Chapter 10</td>
<td>Chapter 9c</td>
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<tr>
<td>30</td>
<td>12/7</td>
<td>Simulink</td>
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<tr>
<td>31</td>
<td>12/12</td>
<td><strong>Final Exam: 5:45 p.m. to 7:45 p.m.</strong></td>
<td>ALL</td>
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<td>Chapter 10</td>
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