<table>
<thead>
<tr>
<th>Week</th>
<th>Approx. Start Data</th>
<th>Topics</th>
<th>Suggested Reading</th>
<th>Assign.</th>
<th>Collaboration</th>
<th>Focus (expected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/24/2016</td>
<td>Course Overview; AI opportunities; Differences from real world AI</td>
<td>Documentation at <a href="http://www.flightgear.org">www.flightgear.org</a></td>
<td>HW1</td>
<td>Partial</td>
<td>FlightGear</td>
</tr>
<tr>
<td>2</td>
<td>8/31/2016</td>
<td>FGI interface; Airplane dynamics; Dynamical Systems; Control</td>
<td></td>
<td>MP1</td>
<td>Any</td>
<td>FGI control</td>
</tr>
<tr>
<td>3</td>
<td>9/7/2016</td>
<td>Linear systems, Stability, Linear control; PID</td>
<td>Wikipedia: &quot;PID controller&quot; GAIP: Ch 40</td>
<td>MP2</td>
<td>Assigned</td>
<td>FGI Takeoff; TO? / Vx? / Vy?</td>
</tr>
<tr>
<td></td>
<td>9/14/2016</td>
<td>NO CLASS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>9/16/2016</td>
<td>Nonlinear control; RL; ML classification / regression</td>
<td>R&amp;N: Ch 18 &amp; 21</td>
<td>MP3</td>
<td>To Be Decided</td>
<td>PID Ailerons</td>
</tr>
<tr>
<td>5</td>
<td>9/28/2016</td>
<td>Behaviors / Operators, Bombable</td>
<td>R&amp;N: Ch 10; AIG: Sec 5.2</td>
<td>MP4</td>
<td>TBD</td>
<td>3 PID indep &amp; dep</td>
</tr>
<tr>
<td>6</td>
<td>10/5/2016</td>
<td>Constraint matching, Unification</td>
<td>R&amp;N: Ch 10</td>
<td>MP5(?)</td>
<td>TBD</td>
<td>MGU</td>
</tr>
<tr>
<td>7</td>
<td>10/12/2016</td>
<td>Nonlinear behaviors/operators Parameter estimation</td>
<td>Wikipedia: Linear least squares, MLE; R&amp;N: Ch 20</td>
<td>MP6</td>
<td>TBD</td>
<td>Basic flying behaviors</td>
</tr>
<tr>
<td>8</td>
<td>10/19/2016</td>
<td>Finite state behavior</td>
<td>AIG: Sec 5.3; GAIP: Ch 4</td>
<td>MP7</td>
<td>TBD</td>
<td>Accuracy course? Air Race? Target practice? Balloons?</td>
</tr>
<tr>
<td>9</td>
<td>10/28/2016</td>
<td>Behavior trees; Multiplayer FG; Threat/target assessment</td>
<td>AIG: Sec 5.4; GAIP: Ch 5-8</td>
<td>MP8</td>
<td>TBD</td>
<td>Team get away / get close</td>
</tr>
<tr>
<td>10.5</td>
<td>11/9/2016</td>
<td>Game theory</td>
<td>R&amp;N: Ch 5, Sec 17.5; AIG: Sec 8.1, 8.2</td>
<td>MP9a</td>
<td>TBD</td>
<td>1 v All or Teams</td>
</tr>
<tr>
<td>11</td>
<td>11/16/2016</td>
<td>Competitive multiagent behavior</td>
<td>GAIP: Ch 29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.5</td>
<td>11/24/2016</td>
<td>THANKSGIVING BREAK</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>11/30/2016</td>
<td>Special topics; expansion</td>
<td></td>
<td>MP9b</td>
<td>same as 9a</td>
<td>Against MP9a agents</td>
</tr>
<tr>
<td>13</td>
<td>12/7/2016</td>
<td>Competition (possibly at final exam time)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TAKEHOME FINAL EXAM / TERM PROJECT DUE ON THE ASSIGNED DATE**