

<i>Date</i>	<i>Events</i>	<i>DTAOKM</i>	<i>Homework sets</i>
<i>Aug. 22</i>	Review of 6210	<i>1 – 6</i>	-
<i>24</i>	Potential energy	<i>7.1, 7.2</i>	-
<i>29</i>	Dissipation functions; kinetic energy	<i>7.3, 7.4</i>	-
<i>31</i>	Kinetic energy	<i>7.5, 7.6</i>	-
<i>Sept. 5</i>	Equations of motion	<i>8.1</i>	Homework 1
<i>7</i>	Discuss homework 1; Newtonian frames	<i>8.2</i>	-
<i>12</i>	Additional equations	<i>8.2, 8.3</i>	-
<i>14</i>	Linearization; systems at rest in Newtonian frame	<i>8.4, 8.5</i>	Homework 2
<i>19</i>	Discuss homework 2; steady motion	<i>8.6</i>	-
<i>21</i>	Motions resembling states of rest; integrals of the equations of motion	<i>8.7, 9.1</i>	-
<i>26</i>	The energy integral; the checking function	<i>9.2, 9.3</i>	Homework 3
<i>28</i>	Discuss homework 3; generalized impulse and momenta	<i>8.8</i>	-
<i>Oct. 3</i>	Collisions	<i>8.9</i>	-
<i>5</i>	Collisions	<i>8.9</i>	-
<i>10</i>	Fall Break – No class	-	-
<i>12</i>	Midterm exam	<i>Through 8.7</i>	-
<i>17</i>	Go over exam	-	-
<i>19</i>	Momentum integrals	<i>9.4</i>	-
<i>24</i>	Momentum integrals; exact solutions	<i>9.4, 9.5</i>	-
<i>26</i>	Numerical integration of ODEs; nonlinear algebraic equations	<i>9.6, 9.7</i>	Homework 4
<i>31</i>	Discuss homework 4; Euler rotation	<i>10.1</i>	-
<i>Nov. 2</i>	Direction cosines; orientation angles	<i>10.2, 10.3</i>	-
<i>7</i>	Euler parameters	<i>10.4</i>	Homework 5
<i>9</i>	Discuss homework 5; Wiener-Milencovic parameters	<i>10.5</i>	-
<i>14</i>	Angular velocity and direction cosines	<i>10.6</i>	-
<i>16</i>	Angular velocity and orientation angles	<i>10.7</i>	Homework 6
<i>21</i>	Discuss homework 6; angular velocity and Euler parameters	<i>10.8</i>	-
<i>23</i>	Give thanks! No class	-	-
<i>28</i>	Angular velocity and Wiener-Milencovic parameters	<i>10.9</i>	-
<i>30</i>	Choosing motion variables	Mitiguy and Kane	Homework 7
<i>Dec. 5</i>	Discuss homework 7; review	-	-
<i>7</i>	Final Exam (2:50 – 5:40 p.m.)	<i>Comprehensive</i>	-

* Updated 10/16/2017; see below for definitions of problem sets

Definitions of homework sets from DTAOKM (exclude problems marked with * unless explicitly written below)	
Homework 1:	From PS 9: 7, 8, 9 From PS 10: 2, 9, 11 From PS 11: 1, 2, 4, 14, 15
Homework 2:	From PS 12: all problems except 4 and 8
Homework 3:	From PS 13: problems 1 – 13
Homework 4:	PS 14
Homework 5:	From PS 13: problems 14 – 19 From PS 15: problems 1 – 3, 11
Homework 6:	PS 16: problems 1 – 12
Homework 7:	PS 17

Updated 7/20/2017