

**Spring 2015**  
**IET4405-850/900 Operations Research – Concepts, Models, & Methods**  
**Course Schedule – Dr. Gregory Wiles**

Module	Class Day	Type	Subject	Reading Assignments	Events/ Problems
	Jan 5 Monday	Live	Course Overview, Syllabus, Schedule	Begin assignments for next week	
<b>1 &amp; 2</b>	Jan 12 Monday	Live	<i>Watch . . .</i> Mod1 & Mod2 Videos  <i>Before next class . . .</i> Introduction to Operations Research, Linear Programming, Min/Max and Break Even Analysis  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 1.1, 1.2, 1.3, 1.4, 1.5 Sections 2.1, 2.2	<i>Work . . .</i> 1.4, 1.9, 1.10, 1.12, 1.15, 2.1, 2.2. (see solutions posted)
			<i>MLK Holiday – No Classes</i>		
<b>3 &amp; 4</b>	Jan 26 Monday	Live	<i>Watch . . .</i> Mod3 & Mod4 Videos  <i>Before next class . . .</i> Graphical solution, extremes, notations, interpretations, optimal solution and constraints. Begin working with software.  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 2.3, 2.4, 2.5, 2.6, 2.7	<i>Work . . .</i> 2.9, 2.10, 2.11, 2.13, 2.19, 2.38, 2.40
<b>5</b>	Feb 2 Monday	Live	<i>Watch . . .</i> Mod5 Video  <i>Before next class . . .</i> Interpreting LP Solutions, sensitivity analysis, 100% rule, work with software, interpreting computer output, more than one decision variables.  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 3.1, 3.3, 3.4 (3.2 is omitted)	<i>Work . . .</i> 3.11, 3.12, 3.15
<b>6A &amp; 6B</b>	Feb 9 Monday	Live	<i>Watch . . .</i> Mod6A and 6B Videos  <i>Before next class . . .</i> LP Applications – additional models  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 4.1, 4.2, 4.3	<i>Work . . .</i> 4.1, 4.4, 4.8, 4.17
	Feb 16 Monday	Online Exam	<b>EXAM 1 today</b>	Review the Sample Exam, HW problems, & book	
<b>8</b>	Feb 23 Monday	Live	<i>Watch . . .</i> Mod8 Video  <i>Before next class . . .</i> Network and Distribution Models – > Transportation > Assignment  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 6.1, 6.2, 6.3	<i>Work . . .</i> 6.1, 6.2, 6.3, 6.9, 6.12, 6.17, 20.1, 20.3
			<i>March 2 – 6 Spring Break – No Classes</i>		
<b>9</b>			<i>Watch . . .</i> Mod9 Video  <i>Before next class . . .</i> More Network and Distribution Models > Transshipment > Minimal Spanning Tree (chapter 20 on CD or download document from this site)	<i>Read . . .</i> Sections 6.1, 6.2, 6.3	<i>Work . . .</i> 6.1, 6.2, 6.3, 6.9, 6.12, 6.17, 20.1, 20.3

	Mar 9 Monday	Live	<b>Work problems in class, Q&amp;A</b>		
<b>9</b>	Mar 16 Monday	Watch . . . Mod9 Video  Live	<i>Before next class . . .</i> More Network and Distribution Models > Shortest Route > Maximal Flow  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 6.4, 6.5	<i>Work . . .</i> 6.23, 6.25, 6.26, 6.28, 6.29, 6.30, 6.31
<b>9</b>	Mar 23 Monday	Watch . . . Mod9 Video  Live	<i>Before next class . . .</i> Practice Network and Distribution Models  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 6.4, 6.5	<i>Work . . .</i> 6.23, 6.25, 6.26, 6.28, 6.29, 6.30, 6.31
	Mar 30 Monday	Online Exam	<i>Before next class . . .</i> <b>EXAM 2 today</b>	Review the Sample Exam, HW problems, & book	
<b>10</b>	Apr 6 Monday	Watch . . . Mod10 Video  Live	<i>Before next class . . .</i> Integer LP Concept Graphical and Relaxation  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 7.1, 7.2	<i>Work . . .</i> 7.2, 7.7, 7.9 <b>See Syllabus for how to get Extra Credit (due on last day)</b>
<b>11</b>	Apr 13 Monday	Watch . . . Mod11 Video  Live	<i>Before next class . . .</i> Integer LP Applications 0-1 Integer Variables  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 7.3, 7.4	<i>Work . . .</i> 7.11, 7.14
<b>11</b>	Apr 20 Monday	Watch . . . Mod11 Video  Live	<i>Before next class . . .</i> More Integer LP Applications Review  <b>Work problems in class, Q&amp;A</b>	<i>Read . . .</i> Sections 7.3, 7.4	<i>Work . . .</i> 7.11, 7.14
	Apr 27 Monday	Online Exam	<b>EXAM 3 today</b>	Review the Sample Exam, HW problems, & book	