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Course Outline

I. Linear Programming:
   - Simplex Method
   - Degeneracy and Anticycling Strategies
   - Initialization
   - Revised Simplex Method

II. Duality Theory
   - Primal and Dual Program
   - Duality Theorem
   - Complementary Slackness
   - Sensitivity Analysis
   - LP Problems In General Form

III. Network Optimization:
   - The Transshipment Problem and Optimality Conditions
   - The Network Simplex Method
   - Shortest Paths
   - The Max Flow Problem

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test #1</td>
<td>33 (Part I)</td>
</tr>
<tr>
<td>Test #2</td>
<td>33 (Part II)</td>
</tr>
<tr>
<td>Final</td>
<td>34 (Parts I, II and III)</td>
</tr>
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Text:

2. Lecture Notes and Additional Material will be made available.