# Schedule

A week-by-week breakdown of the material.

# Week 1 (01/08-01/12)

**Tue** Graph Models (1.1), Connected Graphs  $(1.2)^1$ Activity Sheet  $1^2$ 

**Thu** Common Classes of Graphs (1.3), Multigraphs and Digraphs  $(1.4)^3$  Activity Sheet  $2^4$ 

#### Week 2 (01/15-01/19)

Tue Catchup

**Thu** Degree of a Vertex (2.1)<sup>5</sup>
Activity Sheet 3<sup>6</sup>

## Week 3 (01/22-01/26)

**Tue** Regular Graphs (2.2)<sup>7</sup>
Degree Sequences (2.3)<sup>8</sup>
Activity Sheet 4<sup>9</sup>

**Thu** Graph Isomorphism (3.1), Isomorphism as a Relation  $(3.2)^{10}$ Activity Sheet  $5^{11}$ 

# Week 4 (01/29-02/02)

**Tue** Bridges (4.1)<sup>12</sup>
Assignment 1<sup>13</sup>

<sup>&</sup>lt;sup>1</sup>notes/intro.html

<sup>&</sup>lt;sup>2</sup>activities/activities1-intro.html

<sup>&</sup>lt;sup>3</sup>notes/graph\_classes.html

<sup>&</sup>lt;sup>4</sup>activities/activities2-graph\_classes.html

<sup>&</sup>lt;sup>5</sup>notes/degrees.html

<sup>&</sup>lt;sup>6</sup>activities/activities3-degrees.html

<sup>&</sup>lt;sup>7</sup>notes/degrees.html

<sup>&</sup>lt;sup>8</sup>notes/degree\_sequences.html

<sup>&</sup>lt;sup>9</sup>activities/activities4-sequences.html

<sup>&</sup>lt;sup>10</sup>notes/graph\_isomorphism.html

<sup>&</sup>lt;sup>11</sup>activities/activities5-isomorphism.html

<sup>&</sup>lt;sup>12</sup>notes/bridges.html

<sup>&</sup>lt;sup>13</sup>assignments/assignment1.html

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Thu Trees (4.2)<sup>14</sup>
Activity Sheet 6<sup>15</sup>
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# Week 5 (02/05-02/09)

**Tue** Minimum Spanning Trees (4.3)<sup>16</sup>

**Thu** Minimum Spanning Trees cont.  $(4.3)^{17}$ 

#### Week 6 (02/12-02/16)

**Tue** Cut-vertices  $(5.1)^{18}$ 

**Thu** Blocks (5.2)<sup>19</sup>

Assignment 2<sup>20</sup>

#### Week 7 (02/19-02/23)

Tue Review

Assignment 3<sup>21</sup>

**Thu** Midterm Chapters 1-4<sup>22</sup>

## Week 8 (02/26-03/02)

Tue BREAK

Thu BREAK

# Week 9 (03/05-03/09)

**Tue** Connectivity  $(5.3)^{23}$ 

**Thu** Connectivity continued  $(5.3)^{24}$ 

<sup>&</sup>lt;sup>14</sup>notes/trees.html

<sup>&</sup>lt;sup>15</sup>activities/activities6-trees.html

<sup>&</sup>lt;sup>16</sup>notes/minimum\_spanning\_trees.html

<sup>&</sup>lt;sup>17</sup>notes/minimum\_spanning\_trees.html

<sup>&</sup>lt;sup>18</sup>notes/cut\_vertices.html

<sup>&</sup>lt;sup>19</sup>notes/blocks.html

<sup>&</sup>lt;sup>20</sup>assignments/assignment2.html

<sup>&</sup>lt;sup>21</sup>assignments/assignment3.html

<sup>&</sup>lt;sup>22</sup>notes/midterm1studyGuide.html

<sup>&</sup>lt;sup>23</sup>notes/connectivity.html

<sup>&</sup>lt;sup>24</sup>notes/connectivity.html

#### Week 10 (03/12-03/16)

**Tue** Eulerian Graphs  $(6.1)^{25}$ 

Activity Sheet 7<sup>26</sup>

Hamiltonian Graphs (6.2)

**Thu** Strong Digraphs (7.1)

Tournaments (7.2)

#### Week 11 (03/19-03/23)

Tue Matchings (8.1)

Factorization (8.2)

**Thu** Midterm 2 (Chapters 5-7)

#### Week 12 (03/26-03/30)

**Tue** Decompositions (8.3)

Planar Graphs (9.1)

**Thu** Discussion of the Four Color Theorem (10.1)

# Week 13 (04/01-04/06)

**Tue** Vertex Coloring (10.2)

**Thu** Edge Coloring (10.3)

#### Week 14 (04/09-04/13)

Tue Ramsey Numbers (11.1)

Thu Center of a Graph (12.1), Distant Vertices (12.2)

<sup>&</sup>lt;sup>25</sup>notes/eulerian\_graphs.html

<sup>&</sup>lt;sup>26</sup>activities/activities7-eulerian.html