**BOTANY 4283 – TENTATIVE SYLLABUS -- Spring 2007**

**Instructor:** Scott D. Russell  
**Email:** srussell@ou.edu  
**Office:** 210 EM Lab / 143 GLCH  
**Phone:** 325-4391

**Lecture:** TR 9:30 - 10:20 AM  
**GLCH 129**  
**Laboratory:** TR 1:30 - 3:20 PM  
**GLCH 129**


<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Laboratory</th>
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<tr>
<td>Jan. 16</td>
<td>Introduction to course and the living cell</td>
<td>Microscopy and plant protoplasm</td>
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<tr>
<td>Jan. 18</td>
<td>Endomembrane concept and cytoplasm</td>
<td>Ergastic substances</td>
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<tr>
<td>Jan. 23</td>
<td>Nucleus, mitochondria and plastids</td>
<td>Major organelles</td>
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<tr>
<td>Jan. 25</td>
<td>Cell wall, plasmodesmata and cell division</td>
<td>Cell walls, mitosis &amp; cytokinesis</td>
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<tr>
<td>Jan. 30</td>
<td>Parenchyma and collenchyma</td>
<td>Parenchyma and collenchyma</td>
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<tr>
<td>Feb. 1</td>
<td>Sclerenchyma - Sclereids and fibers</td>
<td>Sclereids and fibers</td>
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<tr>
<td>Feb. 6</td>
<td>Shoot/Root Apex and Epidermis</td>
<td>Epidermis</td>
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<tr>
<td>Feb. 8</td>
<td>Xylem - Tracheids, vessel members, fibers</td>
<td>Xylem</td>
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<tr>
<td>Feb. 13</td>
<td>Xylem - Secondary xylem and wood structure</td>
<td>Xylem 2</td>
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<td>Feb. 15</td>
<td>Xylem - Primary xylem and ontogenesis</td>
<td>Wood identification</td>
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<td>Feb. 20</td>
<td>Laboratory exam #1</td>
<td>Lecture exam #1</td>
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<td>Feb. 22</td>
<td>Vascular cambium / Phloem - Sieve tubes and cells</td>
<td>Vascular cambium</td>
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<tr>
<td>Mar. 1</td>
<td>Phloem - Sieve tubes and cells</td>
<td>Phloem</td>
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<tr>
<td>Mar. 6</td>
<td>Phloem - Ontogenesis and function</td>
<td>Phloem</td>
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<td>Mar. 8</td>
<td>Cork and anomalous cambia</td>
<td>Cork and anomalous cambia</td>
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<td>Shoot apical meristem</td>
<td>Shoot apical meristem</td>
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<td>Mar. 13</td>
<td>Stem - Primary vascular differentiation</td>
<td>Stem organization &amp; nodal anat</td>
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<td>Mar. 15</td>
<td>Stem - Differentiation and secondary growth</td>
<td>Stem types and secondary growth</td>
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<td>Mar. 17-25</td>
<td>Spring Vacation</td>
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<tr>
<td>Mar. 27</td>
<td>Leaf - Organization and organogenesis</td>
<td>Leaf structure and ontogeny</td>
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<td>Mar. 29</td>
<td>Leaf variation</td>
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<td>Apr. 3</td>
<td>Secretory structures</td>
<td>Secretory substances</td>
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<td>Apr. 5</td>
<td>Laboratory exam #2</td>
<td>Lecture exam #2</td>
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<td>Apr. 10</td>
<td>Root - Primary structure and differentiation</td>
<td>Root structure and differentiation</td>
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<td>Apr. 12</td>
<td>Root - Onset of secondary growth</td>
<td>Root secondary growth</td>
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<td>Apr. 17</td>
<td>Flower - Structure and organogenesis</td>
<td>Flower structure and organ</td>
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<td>Apr. 19</td>
<td>Sporogenesis and gametogenesis</td>
<td>Sporogenesis and gametogenesis</td>
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<td>Apr. 24</td>
<td>Fertilization and embryogenesis</td>
<td>Fertilization and embryogenesis</td>
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<td>Apr. 26</td>
<td>Seed, fruit and seedlings</td>
<td>Seed, fruit and seedlings</td>
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<tr>
<td>May 1</td>
<td>Comparative morphol of monocots and dicots</td>
<td>Gymnosperm reproduction</td>
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<td>May 3</td>
<td>Laboratory exam #3</td>
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<tr>
<td>May 10</td>
<td>Thursday May 10  8:00 AM - 10:00 AM</td>
<td>Final Examination</td>
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