

**Schedule**  
**Scientific Illustration of Insects**  
ENT 5051, Fall Semester 2008

**Tuesday 6-7:30 PM 490 Hodson Hall**  
**Thursday 6-9:30 PM 485 Hodson Hall**  
**Beginning October 21st, 6-9:30 PM, Tues/Thurs, computer illustration in 336 McNeil Hall**

**Instructor:** Ralph Holzenthal, holze001@umn.edu, 316 Hodson Hall, 612-624-7728

**Teaching Assistant:** Haude Levesque, leves006@umn.edu, 132 Hodson Hall, 612-626-4964

**WEEK 1**

Tuesday, Sept 2: **Lecture** — What is an insect? Fundamentals of insect anatomy. Importance of accurate illustrations in entomology and examples. Reference sources and websites. The various media and the illustrator's basic "toolbox."  
Thursday, Sept 4: **Studio** — Examination of insect species and structural diversity. Tour of the University of Minnesota Insect Collection. Selecting and preparing a specimen for illustration.

**WEEK 2**

Tuesday, Sept 9: **Lecture** — Introduction to the microscope, drawing tube, and ocular grid. Manipulation and preparation of insects for illustration. The importance of the pencil sketch and its components. Size of the drawing. Notes and records.  
Thursday, Sept 11: **Studio** — Working with the microscope and preparing the pencil sketch. Basic drawing techniques.

**WEEK 3**

Tuesday, Sept 16: Studio — Pencil sketching, continued  
Thursday, Sept 18: Studio — Pencil sketching, continued

**WEEK 4**

Tuesday, Sept 23: **Lecture** — Light, form, and perspective.  
Thursday, Sept 25: **Studio** — Continue pencil sketching and basic drawing. **1st assignment due (pencil sketch).**

**WEEK 5**

Tuesday, Sept 30: **Lecture** — Introduction to pen and ink line illustration: examples, techniques, and media. Begin pen and ink techniques.  
Thursday, Oct 2: **Studio** — Practice with pen and ink techniques.

**WEEK 6**

Tuesday, Oct 7: **Lecture** — Additional pen and ink techniques.  
Thursday, Oct 9: **Studio** — Practice with pen and ink techniques.

**WEEK 7**

Tuesday, Oct 14: **Lecture** — Beyond line drawing - rendering texture, pattern, and shape. Stippling, scratchboard, coquille board, carbon dust, color.  
Thursday, Oct 16: **Studio** — Stippling a line drawing; experimenting with other techniques. **2nd assignment due (pen and ink weighted line drawing).**

**WEEK 8**

Tuesday, Oct 21: **Lecture/Studio** — Introduction to computer illustration using Adobe Illustrator®.  
Thursday, Oct 23: **Studio** —Practice with Illustrator.

**WEEK 9**

Tuesday, Oct 28: **Lecture/Studio** — Adobe Illustrator®, continued. Layers, templates, paths, the pen and other drawing tools, outline stroke, etc.  
Thursday, Oct 30: **Studio** —Practice with Illustrator. **3rd assignment due (pen and ink stipple/crosshatch illustration).**

**WEEK 10**

Tuesday, Nov 4: **Lecture/Studio** — Adobe Illustrator®, continued. Brushes, fills, gradients, gradient mesh, etc.  
Thursday, Nov 6: **Studio** —Continued work with Illustrator.

**WEEK 11**

Tuesday, Nov 11: **Lecture/Studio** — Introduction to Adobe Photoshop®. Digital images - principles and techniques; importing paths, layers, selections, fills, etc.  
Thursday, Nov 13: **Studio** —Practice with Photoshop. **4th assignment due (Illustrator weighted line drawing).**

**WEEK 12**

Tuesday, Nov 18: **Lecture/Studio** — Adobe Photoshop®. Brushes, opacity, filters, etc.  
Thursday, Nov 20: **Studio** — Practice with Photoshop.

**WEEK 13**

Tuesday, Nov 25: **Lecture/Studio** — Adobe Photoshop®. Blend modes, stroking a path, compound eyes, merging and flattening layers, etc. **5th assignment due (Illustrator gradient mesh).**  
Thursday, Nov 27: **No class —THANKSGIVING**

**WEEK 14**

Tuesday, Dec 2: **Studio** — Continue work on Photoshop digital color illustration.  
Thursday, Dec 4: **Studio** — Continue work on Photoshop digital color illustration.

**WEEK 15**

Tuesday, Dec 9: **Lecture/Studio** — Publishing scientific illustrations – traditional and electronic methods. Image file types and saving images.

**FINAL EXAM WEEK (TBA): 6th assignment due (Photoshop full-habitus digital color illustration).**