NSC 840, Writing in the sciences. Goal is to help students improve their writing by meeting in small groups and discussion each others’ writings. (Can be any piece of writing.)

Offered every semester, including summer
Methods

- Detailed descriptions of materials used (e.g. source of insects, food source) and methods of the experiments.
- Can be abbreviated, with a citation of a previous article, but still give the reader a general idea of methods.

[Day and Gastel, p. 60-65]
Methods (continued)

- Use lots of subheadings
  - First words of a paragraph can be like a subheading
- Chronological order for field studies
- Logical order for lab studies
- Statistical techniques in last paragraph of a section
Methods (continued)

- Consider a "general methods" paragraph at the beginning, to describe methods or materials that are common to all or most of the experiments.
  - Insect strains/rearing methods, site locations, insecticides, etc.
Methods outline

- General methods
- Laboratory studies
  - Part A
  - Statistical techniques
  - Part B
  - Statistical techniques
- Field studies
  - Part A
  - Part B
  - Statistical techniques
Methods (continued)

- Past tense
- Try the active voice for methods
  - I/we sampled trees …
  instead of
    Trees were sampled …
Methods (continued)

- Think through your methods, even before you write the first draft
- Review your first draft
- “Walk through”
  - Do they make sense?
  - Are they in a logical order?
  - Could someone else do it?
  - Is anything left out?
Numbers

- In text,
  - Write out numbers one through nine
  - Use numerals for 10 or more
- But always ---
  - Use numerals for all units of measure;
    e.g. 3 h, 4 d, 5 g
Numbers

- Do not start a sentence with a numeral (reword or write out)
  - Larvae (10 per replication) were…
  - Plots (6 m x 8m, five replications)…
  - Five eggs per dish…
- Always use metric system
  - m, km, kg, metric tons, hectares, etc.
Metric Units

- Always use correct abbrev.
  - $\mu$g, mg, g, kg
  - s, h, d, wk, mo
  - ml, liter
  - mm, cm, m, km
  - not hr, gm
  - not ml., sec.

- Do not use plural “s”

- Specify all units in figures and tables (e.g., insects/m$^2 \pm$ S.E.)
Methods (continued)

- A table can be helpful to summarize information that is too lengthy to include in the text and that the reader may need to refer to later.

- Use figures to show geography or apparatus that can’t be easily described in text. More common in thesis or dissertation than in journal article.
Photos should generally be black and white. Again, these are more common in the thesis or dissertation.

- B&W is more easily accepted by graduate school and can be photo copied.
- It’s often harder to show things in a photo than in a drawing
Assignments

- Read Day and Gastel, Chapter 11
- Revised Introductions and Materials and Methods due February 17
- Small groups on February 23 or 24
- Lecture (Figures and Tables) Feb 24