**STEM Advanced Composition**

We will be reading and using templates offered in *They Say, I Say: The Moves that Matter in Academic Writing* by Gerald Graff and Cathy Birkenstein. You can find a PDF of the book at <https://statumenglish.weebly.com/stem-resources.html>

Read chapter 13 of *They Say, I Say*. Annotate the following basic elements for your research paper within the chapter. Label the elements directly on the chapter; then write the page number from the chapter on this outline.

**BASIC RESEARCH PAPER OUTLINE**

1. Introduction
   1. Definition of the problem
   2. Description of nature of problem
   3. Narration of personal interest in issue
   4. Assertion of claim statement (to be refined after research)
2. Literature Review (sources—THEY SAY)
   1. Theories
   2. Similar cases
   3. Possible solutions
3. Methodology (Data Collection)
   1. Research question
   2. Hypothesis
   3. Engineering goals
   4. Expected outcomes
   5. Procedures
   6. Risk/Safety
4. Data Analysis
   1. Description of data collected
   2. Conclusions drawn from data
5. Argument (personal interpretation--I SAY)
   1. Claim statement of implications from your findings
   2. Reasons that support the claim statement
   3. Evidence that prove the validity of the claim statement
6. Next Steps
   1. Action plan
   2. Predicted Results