SOME GENERAL PRINCIPLES FOR TEACHING ACADEMIC WRITING IN THE DISCIPLINES

1. Establish your course goals (often stated in syllabus as learning outcomes)
   - subject matter goals—the new knowledge (facts, concepts, theories, methods) that you want students to learn
   - critical thinking goals—new ways that you want students to see or think: disciplinary processes of inquiry, critical reading, analysis, and argument
   - other goals connected to departmental or general-education/core outcomes or to your own approach

2. Design critical thinking problems connected to your course goals.
   - Problems should stimulate interest in the subject matter and provoke inquiry
   - Problems should engage students with subject matter knowledge while promoting disciplinary ways of thinking, analyzing, and arguing
   - Highest level of critical thinking typically comes from "messy," "ill-structured," or open-ended problems with no algorithmically attained "right answer"—problems that lead to a claim with supporting arguments.

3. Develop a repertoire of ways to give critical thinking problems to students
   - Thought provokers for exploratory writing (one-page "thinking pieces," in-class freewrites; posts to course discussion boards; journal entries; other kinds of informal, non-graded writing)
   - Short (2-3 page) assignments or very short (one-paragraph) microtheme assignments
   - Longer, formal writing assignments often requiring research
   - Tasks for small-group problem solving, debates, or whole-class discussion
   - Essay exam questions or practice exam questions

4. Think of writing assignments as a crucial part of course design
   - "Reverse engineer" your course by designing the final assignment first (principle of "backward design")
   - Create earlier assignments that develop the skills needed for the final assignment (sometimes called "scaffolding assignments")
   - Consider adding informal low-stakes writing to help students explore ideas and promote learning
   - When designing a formal assignment, create or simulate an authentic rhetorical context: purpose, audience, and genre (avoid "school genres" such as "research paper" or "lab report")
   - Help students understand the rhetorical function of titles and introductions by asking them to assume that their readers haven't read the assignment

5. When assigning formal writing, treat writing as a process
   - Provide opportunities for exploration of ideas prior to drafting (thinking pieces, class discussion, annotated bibliographies, role-playing multiple perspectives)
   - Encourage imperfect first drafts
   - Stress substantial revision reflecting increased complexity and elaboration of thought and increased awareness of readers' needs
   - Where possible, allow rewrites; write comments that encourage revision and that emphasize the higher order concerns of ideas, thought content, organization, and development
   - Consider instituting peer review workshops and encourage use of writing center

6. Develop scoring criteria and give them to students in advance
   - simple numerical or +/-check/- scales for exploratory writing
   - rubrics for formal writing
FOUR EFFECTIVE WAYS TO CREATE PROBLEM-BASED ASSIGNMENTS

1. Give students a problematic thesis to defend or attack
   - In recent years, advertising has (has not) made enormous gains in portraying women as strong, independent, and intelligent.
   - The paper by Baron-Cohen et al. supports (undermines) the nature theory of gender identity
   - The overriding religious view expressed in Hamlet is (is not) an existential atheism similar to Sartre's.
   - Prescribing Ritalin and other psychotropic medications is (is not) an appropriate treatment for behavioral problems of children.

2. Give students a problem-laden question
   - What should Project Manager Hisako Hirai propose to her supervisor in response to the problems that have cropped up in Week Three? Role-playing Ms. Hirai, write a memo to your supervisor presenting and justifying your recommendations [part of a business management case]
   - Do you believe that the proposed air bearings provide the optimal solution for the circumference-mounted radiator fan?
   - How would Person A’s approach to this problem differ from Person B’s? What is at stake?

3. Give students raw data (such as lists, graphs, tables, etc.) and ask them to write an argument or analysis based on the data
   - To what extent do the attached economic data support the hypothesis "Social service spending is inversely related to economic growth"? First create a scattergram as a visual test of the hypothesis. Then create a verbal argument analyzing whether the data support the hypothesis
   - Your friend and you are looking over Table 1 [next page of this handout] and note that in 1998 the median income for all families was $33,400 but the mean income was $53,000. Your friend was confused about the difference but had to leave for work. Send your friend a coherent, well-structured email message about one screen in length that explains the difference between "mean income" and "median income" and that speculates about the economic factors in the United States that lead to such differences between mean and median incomes. To put it another way: What can we say about the distribution of income in the United States if we know that mean income is considerably higher than median income?

4. Let students develop their own questions
   - Now that we have practiced asking interpretive questions about poems, consider Yeats’ “Among School Children.” Propose your own interpretive question about this poem, and then write an explication of the poem that tries to answer your question.
   - What questions about __________ are left unanswered in Hamilton’s article?

---

GENERIC METHOD FOR CONVERTING A "RESEARCH PAPER" INTO A PROBLEM-BASED DISCIPLINARY PAPER

**Task:** Write a 7-10 page analytical or argumentative paper on a significant question related to any aspect of [course subject matter]. The introduction to your paper should pose the question or problem that your paper will address and engage your reader's interest in it. Your proposed answer to this question (summarized in a single sentence) will serve as the thesis statement for your paper. Imagine this paper will be delivered at an undergraduate research conference. Assume that your audience has NOT read this assignment and will attend your conference session because your title hooked their interest.

**Prospectus:** Midway through the course, you will submit to the instructor a prospectus that describes the problem or question that you plan to address and shows why the question is (1) problematic and (2) significant