

Attempted Writing Assignments for Biochemistry I (CHE 452)* Fall 1994-Fall 2007

Michele R. Harris, Ph.D.
Associate Professor of Chemistry

previous methods tried	pros	cons
<ul style="list-style-type: none"> • assign research paper – open topic but instructor approval required • spent quite a bit of class time early in semester explaining expectations, how to do research, defining plagiarism, giving examples 	<ul style="list-style-type: none"> • wide <i>variety</i> of papers • better students turned in good products 	<ul style="list-style-type: none"> • poorer students completely overwhelmed and turning in terrible product/plagiarism • too many students procrastinating • biology students wrote a paper over their senior seminar for biology
<ul style="list-style-type: none"> • assignment of topics 	<ul style="list-style-type: none"> • gave students a <i>starting point</i> 	<ul style="list-style-type: none"> • students got topics that were not interesting to them • did not really see an improvement in product
<ul style="list-style-type: none"> • allowing choice of topics from a list 	<ul style="list-style-type: none"> • students got to <i>choose</i> something from list that was interesting to them 	<ul style="list-style-type: none"> • did not really see an improvement in product • problems with plagiarism
<ul style="list-style-type: none"> • required a one page summary and minimum of two references turned in one month before paper was due 	<ul style="list-style-type: none"> • better students were <i>helped</i> by this approach • made students think more and had less procrastinating 	<ul style="list-style-type: none"> • students still only wrote summary the night before it was due and then procrastinated on working on the paper
<ul style="list-style-type: none"> • made copies of good research papers available 	<ul style="list-style-type: none"> • typically better students took time to use this resources and was <i>helped</i> by it 	<ul style="list-style-type: none"> • poorer students that needed more help did not take advantage of opportunity
<ul style="list-style-type: none"> • encouraged students to peer review and come by my office for review before turning in for grade 	<ul style="list-style-type: none"> • students doing well used this and benefited 	<ul style="list-style-type: none"> • poorer students would not do this • procrastination did not allow time for review
<ul style="list-style-type: none"> • arranged anonymous peer-review in class (after paper was turned in) the reviewer got a quiz grade for reviewing a paper 	<ul style="list-style-type: none"> • better students were <i>appalled</i> at some of the examples and were very willing to explain how poor the paper was • had <i>less complaints</i> about the grading being too difficult 	<ul style="list-style-type: none"> • takes an entire class period • poorer students typically assumed the class “genius” wrote the paper and stated that the paper was too difficult to understand

new methods this semester	pros	cons
<ul style="list-style-type: none"> required reading of a summary article (<1 pg) from <i>Chemical & Engineering News</i> (written for the general chemical community) required the student to find original journal article and write their own summary 	<ul style="list-style-type: none"> the article was <i>easier</i> for students to understand a small assignment <i>eased</i> students into searching the literature 	<ul style="list-style-type: none"> all students wrote on same article and some students seemed to get too much help from others students and did not learn how to search the literature on their own
<ul style="list-style-type: none"> allowed students to choose one of four longer articles (>3 pg) from <i>Chemical and Engineering News</i> and write an article explanation with supporting documentation 	<ul style="list-style-type: none"> students just turned this assignment in smaller assignments seem to be <i>less intimidating</i> to students 	<ul style="list-style-type: none"> asked questions on exam (on Friday when writing assignment was due Monday) about the chosen article and half the students could not answer
<ul style="list-style-type: none"> picked four articles from <i>Biochemistry</i> (premier journal in field) and students will pick one article and write an article explanation using supporting documentation 	<ul style="list-style-type: none"> unknown at this time 	<ul style="list-style-type: none"> unknown at this time

***General information about the class:**

- Composed primarily seniors (also have a few juniors and graduate students from biology or agriculture)
- Typical majors represented: chemistry, biology, pre-health professional, nutrition
- Required for graduation for most majors
- Minimum prerequisites: 12 hours of chemistry
- Most students have had at least 12 hours of biology or other sciences
- Essay answers required on exams and quizzes throughout the semester
- Overall, students are motivated to do well