

Chemical Information and Writing
CHE 391W
Spring 2009, SC 165

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- **Office hours:** Mon 10-11; Tues 1:00 - 2:00; Fri 7:30-8:30. There could be times when others schedule meetings that I must attend during these times. So if you are planning a trip to campus just for my office hours, please check with me ahead of time to make sure I can be there.
- **Open Door Policy:** I have an open door policy. This means, if my door is open, you should feel free to stop by for any reason. Just tell the administrative assistant you are in my writing class. There may be times we have to be briefly interrupted for signatures, etc. If my door is closed or partially closed, it means I am working on something with a deadline. Under these circumstances, please ask the administrative assistant to make an appointment.
- **Appointments:** If you know you'll need extended time to discuss particular writing assignments, feel free to make an appointment to avoid interruptions.

Required Texts and Materials:

The ACS Style Guide: A Manual for Authors and Editors, 3rd. ed.; ACS; Washington, 2006

Students will:

- be required to make copies of materials for occasional class distribution; expected expense is between \$10 - \$15.
- necessarily have access to a computer and to the internet.
- need paper for in-class writing assignments and a bound notebook for journal entries
- need a flashdrive or discs to save and back up work (please back up on your NKU drive as well).
- need folders for turning in the formal assignments.

Other materials:

On reserve in the library:

Hacker, D; *A Writer's Reference*; Bedford/St. Martin Press

Course Description

CHE 391W is designed to help you develop the skills and strategies for planning, organizing, writing, revising, reviewing and editing the kinds of writing most commonly used to communicate in the chemistry profession. The class will be conducted as a workshop. This means that the format of class sessions will include not only lectures and presentations about types of writing in chemistry, but also in-class writing exercises, discussion and analysis of readings, peer review sessions, and conferences with the instructor. In peer review sessions, you will present your work to a group of students or to the entire class for comments, questions, and suggestions, and you will read and comment on the work of other students.

Student Learning Outcomes

Students who complete this course will be able to:

- read, analyze and describe the writing strategies in scholarly articles, reports, and abstracts as well as in articles intended for general audiences.
- write clearly and effectively to communicate information presented in research and the chemical literature and to argue the validity of the conclusions presented by the authors.
- use different formats or genres common to writing in the chemistry profession such as abstracts, scientific journal articles, critical reviews, memos and letters.
- search a wide variety of print and electronic sources, including online sources such as SciFinder Scholar and databases such as C.A.B. International, Beilstein, Gmelin, and Medline. Students will be introduced to some of these databases in order to be made aware of their content.
- avoid plagiarism and cite and document sources correctly. They will also understand the ethics involved in writing and presenting scientific information.
- present polished work that adheres to the conventions and formats in the chemistry profession and to the rules of English grammar, usage, and mechanics.

Department of Chemistry Student Learning Outcomes

This class fulfills the following departmental programmatic student learning outcomes:

- Compile, critically evaluate, and interpret scientific information and data.
- Effectively communicate scientific information through written and oral means.
- Apply effective group strategies to solve scientific problems.
- Apply computer technology and other technologies in the comprehension, interpretation, and presentation of the chemical sciences.

Prerequisite: One upper division chemistry course and a major within the Department of Chemistry or consent of the chair of the Department of Chemistry.

Assignments

- (1) Non-writing assignments will include readings from various sources and research for articles and information. There is no separate grade for this part of the course. It is just a requirement to complete the assigned work.
- (2) Writing assignments will fall into one of two categories: formal and informal.

Formal Writing Assignments: 60% of your grade

- Formal assignments will usually undergo one or more drafts. The final work will be graded for content, writing, referencing, etc. An assignment sheet with detailed instructions will be handed out for each of the four formal assignments.
- **Abstracts: Due Mon Feb 9** Write abstracts of reports or scientific journal articles. Articles without their abstracts will be provided by the instructor. Student abstracts will then be compared to those presented in the original article (when available) so that students can develop techniques in writing abstracts for their own research. (100 points)
- **Lab Report: Due Mon Mar 2** Students will use information from a previous chemistry lab experiment and write a formal report with the information from that report. (100 points)
- **Proposal Comparison: Due Wed Apr 13** Compare internal research proposals submitted by faculty or students for funding by NKU in order to compare writing styles and develop a method for evaluating proposals. Students will argue their evaluations before the class. Students are expected to check references for content and appropriateness to the proposal. (100 points)
- **Research Paper: Due Fri Apr 24.** Write a 8-10 page research paper on a specific current topic in chemistry **OR** write a 8-10 page chemistry research proposal. In either choice, a comprehensive bibliography written using ACS guidelines must be included. (200 points total)
 - *Please note, to write an effective research paper, you will need to begin working on it well before April.*
 - Abstracts/List of ideas – due Feb 2 (10 points)
 - Topic - due Feb 16 (10 points)
 - Paper outline – due Mar 16 (10 points)
 - Draft bibliography with at least five primary journal articles – due Mar 30 (10 points)
 - First Draft – due Apr 6 (60 points)
 - Final Paper – due April 24 (100 points)

Informal Writing Assignments: 20% of your grade

- Informal assignments will typically be short (1/2 - 2 pages). They may often be handwritten and will often be completed in class. These assignments will not be graded for accuracy, but rather will be checked for completeness. They will serve as the starting point of a conversation between writer and reviewer. The sole purpose of these assignments is to support the learning of writing techniques.
- **Journal:** Students will be required to keep a journal to be turned in approximately once a month. These will be reflective pieces on reading assignments or journal assignments given in class. They could also contain your pre-writing thoughts. There should be a minimum of two entries per week even if no specific journal assignments have been given in class. Please write your journal entries in a bound notebook. Each entry should start on a new sheet of paper with your entry date and writing prompt (if given) at the top of the page.
- **In-class exercises.** Assignments will range from continuous writing works, to ideas for papers, to practice techniques of different writing styles and others.
- **Others:** These assignments will vary widely depending on the needs and wishes of the students in the class. They could include :

1. Resume and cover letter
2. Explanation of a single chemistry principle to various audiences.
3. Persuasive memo or letter to argue a point to an authority position.

(3) Presentation: *10% of your grade*

- Each student will use his or her research paper topic as the basis of a presentation to the class.
- During the last few days of class, each student will use 10-15 minutes to present the work to the class, using Power Point (and other aids if appropriate).

(4) Final "Exam": *10% of your grade*

In place of an exam, students will be asked to write two pieces during the exam period in response to writing prompts. Students may be given a reading assignment ahead of time to be used for one or both writing prompts.

Grading

- Grades on formal assignments will be based on the ABCDF rubric used by the Writing Instruction Program at NKU. This rubric is included at the end of the syllabus. I will assign a letter grade consistent with the strength of the paper. (A numerical value will then be given consistent with the course grading scheme below).
- Grades on informal assignments will be based on completeness. A check plus (3)/check (2)/check minus (1)/minus system (0) will be used; the overall percentage determines the grade for this section.
- Late assignments will be penalized 20% per day.

<u>Overall Score</u>	<u>Letter Grade</u>	<u>Grade Distribution:</u>	
90 - 100%	A	Formal Assignments:	60 %
80 - 89%	B	Informal Assignments:	20 %
70 - 79%	C	Presentation:	10 %
60 - 69%	D	Final "Exam":	10 %
0 - 59%	F		

Writing Center

The Writing Center will assist you, free of charge, with your writing assignments. They can help you develop a research strategy, start a draft, revise, and edit. When you go, bring your assignment sheet and any materials on which you are working. They are located in the Learning Assistance Center, FH 209, phone 572-5475, www.nku.edu/~laplearn. You can make appointments on line at Tutortrac, but first you must go to the Center and register for Tutortrac. All students must use the writing center for at least the designated formal assignments.

Submission of Formal Assignments

Save all of your work that leads up to a formal assignment final piece. When you submit a formal assignment for grading, you must include plans, notes, research, drafts, references, professor comments, and workshop comments as well as the typed formal paper, all in the same folder. All of these assignments must be submitted on schedule throughout the course. Neglect of these directions can result in a significant grade reduction or even a failing grade for the project. To ensure that your instructor receives your work, submit all assignments personally in class or by email as directed. You are responsible for the safe, on-time delivery of all assignments. Keep electronic copies of all your work. In addition, we will use turnitin.com on some assignments as a plagiarism checker. For assignments that require electronic submission, please name the work with the following format: last name_formal assignment_description. (For example: Smith_lab report_introduction).

Attendance and Participation

Regular and punctual attendance, completing assignments on time, and class participation is mandatory. Because much of our work will be done in class, four absences may result in your final grade being dropped one letter grade, five to eight absences may result in your final grade being dropped two letter grades, and more than eight absences may result in a grade of F for the course. Students who are absent may not get credit for any in-class points on that day, but see below for ways to make this up.

Extra Credit

You may earn bonus points by attending chemistry/biochemistry talks and writing a one page review of the presentation. You can earn up to one point per review for a maximum of five talks/reviews – these will be added to your informal writing score and could be used to earn points from missed work due to absences.

Important Dates:

MLK Holiday, no classes:	January 19
Last day to drop without a grade:	February 2
<i>Abstracts/idea list for project due:</i>	<i>February 2</i>
<u>Abstract portfolio due:</u>	<u>February 9</u>
<i>Topic for project due:</i>	<i>February 16</i>
<u>Lab report portfolio due:</u>	<u>March 2</u>
Spring break, no classes:	March 9 -13
<i>Outline for paper due:</i>	<i>March 16</i>
Last day to drop with a W:	March 30
<i>Bibliography due:</i>	<i>March 30</i>
<i>First draft of paper due:</i>	<i>April 6</i>
<u>Proposal Comparison portfolio due:</u>	<u>April 13</u>
<i>Final paper due:</i>	<i>April 24</i>
Presentations:	week of April 27
Final exam period:	Monday, May 4, 10:10 – 12:10
Journal Due Dates:	Jan 30, Feb 27, Mar 27

LEGAL STUFF:

- Some class periods may be used for conferences on papers so there may be days where we won't meet as a class.
- ALL ITEMS on this syllabus are subject to change by the instructor.
- Students are responsible for reading and understanding all items on this syllabus. Any items not understood must be brought to the attention of the instructor within the first two weeks of class.
- Plagiarism cannot be tolerated in any class, but especially not in a writing course. You will receive a grade of 0 for the first such incident. Repeat plagiarism violations will result in more severe penalties such as an F for the course, expulsion from the course, and/or report to the Dean of Students. "The work you will do in this course is subject to the Student Honor Code. The Honor Code is a commitment to the highest degree of ethical integrity in academic conduct, a commitment that, individually and collectively, the students of Northern Kentucky University will not lie, cheat, or plagiarize to gain an academic advantage over fellow students or avoid academic requirements."
<http://www.nku.edu/currentstudents/policies/honorcode.php> It is the student's responsibility to understand the meaning of plagiarism and how to avoid it. A contract outlining this policy must be signed and turned in before the first portfolio will be accepted for grading.
- Faculty members reserve the right to dismiss or to have removed a disruptive student from their classrooms.
- Students with disabilities who require accommodations (Academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, Suite 320 or call 859-572-6373 for more information. Verification of your disability is required in the Disability Services Office for you to receive reasonable academic accommodations.

CHE 391W Grading Standards

Adapted from the NKU Writing Program

<http://www.nku.edu/%7Enkuwip/Students/Grading.html>

A	<p>An “A” paper commands attention because of its insight, development, and mature style. It demonstrates a high degree of competence in response to the assignment but may have a few minor errors.</p> <p>A paper in this category:</p> <ul style="list-style-type: none">* is effectively organized and coherently developed* very clearly explains or illustrates key ideas* demonstrates facility and creativity in the use of language* is virtually free from errors in mechanics, usage, and sentence structure* is correct in chemistry content and interpretation
B	<p>A “B” paper is thoughtful, focused, and detailed. It is solid, but lacks the "punch" of an A paper. It demonstrates clear competence in response to the assignment but may have minor errors.</p> <p>A paper in this category:</p> <ul style="list-style-type: none">* is generally well organized and coherently developed* explains or illustrates key ideas* demonstrates some facility in the use of language, with some sentence variety* is generally free from errors in mechanics, usage, and sentence structure* is generally correct in chemistry content and interpretation, though a few minor errors may be present
C	<p>A “C” paper is satisfactory; "C" is not bad, it demonstrates a competent, adequate response to the assignment.</p> <p>A paper in this category:</p> <ul style="list-style-type: none">* is adequately organized and developed* explains or illustrates some of the key ideas* demonstrates adequate use of language* may display some errors in mechanics, usage, or sentence structure, but not a consistent pattern of such errors* may display errors in chemistry content and interpretation
D	<p>A “D” paper demonstrates some degree of competence in response to the assignment but is clearly deficient in some ways. It may fail to respond to the assignment or it may respond simplistically, reflecting an incomplete understanding of the assignment. It may lack coherent structure or elaboration with appropriate examples.</p> <p>A paper in this category reveals one or more of the following weaknesses:</p> <ul style="list-style-type: none">* inadequate organization and development* inadequate explanation or illustration of key ideas* a pattern or accumulation of errors in mechanics, usage, sentence structure, and/or chemistry content and interpretation
F	<p>An “F” paper demonstrates fundamental deficiencies. It frequently presents an illogical, inappropriate, or incoherent response to the assignment. It may contain simplistic or inaccurate word choices, fragmented sentences, or many repeated errors in grammar and usage. An “F” essay may also fail to credit sources or show other signs of plagiarism.</p> <p>A paper in this category reveals one or more of the following weaknesses:</p> <ul style="list-style-type: none">* weak organization or very little development* little or no relevant detail* serious errors in mechanics, usage, sentence structure, word choice, chemical information