CHE 298 ~ Fall 2006
Chemical Information Literacy

Jennifer Frederick, Ph.D. Alycen Nigro, Ph.D.
SB 301 SB 305
Phone: 203.837.9365 Phone: 203.837.8232
Email: frederickj@wcsu.edu Email: nigroa@wcsu.edu
Office Hours: M 2-3, W 11-1, R 12-2 Office Hours: MW 11-12, 2:30-3:30, F 9-10

Schedule: Friday 3-3:50 pm, SB 164 or Haas Library

Semester hour credit: 1.0

Prerequisites: CHE 110 and CHE 111

Course Description: This course will introduce students to scientific information literacy and provide valuable research tools as a foundation for future coursework. Goals of the course include teaching students how to formulate research questions/topics; how to use library and online resources effectively; how to evaluate resources with regard to validity, integrity, sources, relevance, etc.; and how to negotiate ethical and legal boundaries concerning citations and plagiarism, copyrights, photocopying, etc. The course will feature a blend of lectures, hands-on computer workshops, and mini-projects designed to equip Chemistry/Biochemistry majors for success in the “Information Age.” The course is intended for sophomores or higher.

Course materials: There is no textbook. All students must have reliable access to the WCSU computer network. This course will utilize internet-based databases, tools, and sources.

Rules:
1. Bring a notebook and pen or pencil to each class.
2. Please silence cell phones/pagers/whatever electronic gizmo you are attached to.
3. When meeting in SB 164: you are permitted to bring water in the classroom. ABSOLUTELY NO FOOD OR DRINK. (Science Building policy)
4. When meeting in the computer lab: ABSOLUTELY NO FOOD OR DRINK.
5. When using the computer lab, focus on the task at hand. This means NO random web browsing, chatting, or email checking.

Attendance Policy: Because your grade depends heavily upon participation and in-class activities, you must attend every class. You may miss one (1) class with no penalty provided that you arrange a make-up assignment in advance with an instructor. Additional missed classes will result in zero points for the work on that day. Attendance will be taken at each class. Leaving early or arriving late may count as an absence.

Grading: Each class period will be worth 10 points. Depending on the activity du jour, these points will be awarded for participation and positive contribution to the class (consider this automatic if you bring a willingness to learn, ask questions, and show general interest), and/or for in-class activities (hands-on computer work, brief written assignments, quizzes, and the like).
Letter grades will be assigned on the following percentage basis:

- **A**: > 93
- **A-**: 90-92
- **B+**: 86-89
- **B**: 82-85
- **B-**: 78-81
- **C+**: 73-77
- **C**: 69-72
- **C-**: 65-68
- **D+**: 60-64
- **D**: 55-59
- **D-**: 50-54
- **F**: Below 50

**Withdrawal Policy:** The last day to withdraw from the course without penalty (with a grade of “W” on your transcript) is November 13, 2006.

**Additional Help:** You can have as much help as you are willing to ask for. This is largely a hands-on, participatory class. If you leave class unclear about aspect of the informational tools discussed that day, ask an instructor or spend some extra time with a classmate or on your own to familiarize yourself with the resource.

**Outcomes:** Students who take CHE 298 will achieve the following outcomes.

1. Appreciate the value of information literacy.
2. Become familiar with chemical information resources of the WCSU library.
3. Become familiar with chemical information resources publicly available through the internet.
4. Understand the strengths and limitations of various information sources.
5. Learn how to formulate appropriate research topics or research questions.
6. Improve one’s ability to select appropriate resources for a particular query, and to evaluate quality and usefulness of information sources.
7. Clearly understand what plagiarism is and how to avoid it through proper citation.
8. Develop a foundation of chemical information literacy that will be useful in upper-level coursework for chemistry/biochemistry majors.
## Chemical Information Literacy – Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic/Activity</th>
<th>Location</th>
</tr>
</thead>
</table>
| 9/8  | Introduction to information literacy, chemical information literacy, and general methods (pre-test)  
Reading assignment:  
http://www.educause.edu/pub/er/review/reviewArticles/31231.html  
http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm | SB 164  
JF/APN |
| 9/15 | In-class activity: TIP tutorial  
http://library.wcsu.edu/web/assistance/literacy/ | Haas 413  
APN |
| 9/22 | Tools for chemists: where to start, source types, etc. (‘funneling’ activity – choosing a topic) | Haas 413  
JF |
| 9/29 | Haas library: online resources, searching for books/articles – and beyond | Haas 413  
Nair |
| 10/6 | Haas library: computer activity and citation formats (use selected topic to develop 5-item annotated bibliography of relevant sources) | Haas 413  
JF |
| 10/13 | Non-journal literature: patents, internet at large | Haas 413  
JF/APN |
| 10/20 | Evaluation of resources (validity, integrity, relevance, etc.) | Haas 413  
JF |
| 10/27 | Chemical Abstracts – introduction and manual searching | Chemistry library  
Hines |
| 11/3 | Chemical Abstracts – subscription service | Haas 413  
Nair |
| 11/10 | Inorganic tools/databases; Physical tools/databases | Haas 413  
Secondo |
| 11/17 | Biochemistry tools: PubMed, MEDLINE | Haas 413  
JF |
| 11/24 | Thanksgiving Break – no class | |
| 12/1 | Bioinformatics | Haas 413  
APN |
| 12/8 | Legal/ethical issues (plagiarism, citations) | Haas 413  
APN |
| 12/15 | Conclusions, post-test | SB 164  
JF/APN |