

Request of General Education Overlay
Information Literacy (IL)

Course # <u>CHEM430</u>	Title: <u>Advanced Organic Chemistry</u>	4 sh
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A completed cover sheet and the first page of the course syllabus must accompany a proposal for a course to fulfill a general education overlay requirement. For each criterion list from the course syllabus the objectives and activities that fulfill it. Provide examples of actions, procedures, or exercises that illustrate how each criterion will be met. All bullets of the criteria must be met. Please type. (This does not replace the UCC Proposal Cover Sheet.)

Criteria for Information Literacy (IL)

The purpose is to help students develop critical thinking skills and technical skills that enable them to access, evaluate, and use information to solve problems, answer questions, and meet informational needs.

Criteria	Course Objectives and Activities
<ul style="list-style-type: none"> Define the information task, recognize when information is needed, understand various types of information, and identify specific information needs. 	<ul style="list-style-type: none"> Objectives 1, 5, 7, 8, 9, 10; Activities 1, 5, 7, 8, 9, 10 <p>There will be several information literacy assignments which might include: a literature review and research protocol, a topical review paper, and a formal scientific laboratory report. Each assignment will have a specific structure, and within that, the student will identify information needs and types of information necessary to complete the assignment.</p>
<ul style="list-style-type: none"> Develop information-seeking strategies, identify types of sources needed, identify major concepts and key words, develop search strategies for locating specific information. 	<ul style="list-style-type: none"> Objectives 10; Activities 8, 9 An update in library instruction will be delivered to the students. The student must be able to seek appropriate scientific research according to the criteria established in the assignment. Each student has to recognize the difference between primary and secondary literature sources and their appropriate use. Students must apply the research process to develop a search strategy to obtain the necessary information. Students in the Chemical Literature course have had an introduction to the library resources which are used in chemical research (e.g. handbooks, reviews, monographs, compendiums and abstracts)
<ul style="list-style-type: none"> Develop technical skills needed to search for and access information using traditional and electronic sources to locate and retrieve information, and to organize and store information in correct and searchable formats. 	<ul style="list-style-type: none"> Objective 10; Activity 8, 9 Each student participates in a library session in which he/she is taught to use electronic data bases. The student must then complete a literature search where he/she outlines the search strategy used, obtains sources and develops a preliminary bibliography on a particular topic, using the style used according to the American Chemical Society guidelines. All references must be properly cited.
<ul style="list-style-type: none"> Evaluate information using critical 	<ul style="list-style-type: none"> Objectives 10; Activity 8, 9.

<p>thinking skills; determine relevance, authority, completeness, bias, and accuracy of information; distinguish among opinion, reasoned argument, and fact; and understand the concept of intellectual property and copyright.</p>	<p>In all written assignments each student must select literature sources that are appropriate to support the thesis of the paper. The student evaluates the sources obtained based on the author(s), and must use the standards of the discipline to evaluate the credibility of a particular information source in the paper.</p>
<ul style="list-style-type: none"> • Synthesize information, integrate new information with previously known information, organize total information into a comprehensive whole. 	<ul style="list-style-type: none"> • Objectives 10; Activity 8,9. <p>For the research project, there are several stages of work submission. Each student chooses a topic and discusses with the instructor the approach he/she will take with the topic. The student then submits a draft of the paper and obtains critiques from the instructor in order to improve the final paper. All of these steps include evaluating the sources used and questioning whether the information has been interpreted, synthesized and used correctly to support the position of the research paper.</p>
<ul style="list-style-type: none"> • Communicate information; present information to others in written, oral, or electronic form. 	<ul style="list-style-type: none"> • Objective 10; Activity 10. <p>Each student submits several written assignments that demonstrate his/her ability to communicate scientific information correctly and in the manner of the discipline. Each student is also required to deliver an oral PowerPoint presentation of the research project to the class.</p>