

Assessment Plan: Core Competencies in Chemistry

Overview: The core competencies of oral communication and information literacy are assessed yearly via direct, summative assessment in a senior capstone course, Chemistry Seminar (CHE495).

1) Oral Communication

Outcome Measure: Chemistry Research Study Presentation

Criteria for success: At least 80% of students will have an average score of 3 or higher.

Rubric: See below.

2) Information Literacy

Outcome Measure: Chemistry Research Study Presentation

Criteria for success: At least 80% of students will have an average score of 3 or higher.

Rubric: See below.

CHE 495 rubrics (Oral Communication and Information Literacy)

| | Outstanding | High satisfactory | Low satisfactory | unsatisfactory |
|---------------------------------------|---|---|---|--|
| Command of background material | <ul style="list-style-type: none"> • Clearly knows material and key facts by memory • Expands on PPT slides • Content and language appropriate for audience | <ul style="list-style-type: none"> • Clearly knows key facts with a few memory slips • Some expansion on PPT slides • Partial audience adaptation of content | <ul style="list-style-type: none"> • Read some information; knows some facts from memory • No expansion on PPT slide content • little audience adaptation of content | <ul style="list-style-type: none"> • Read sentence from slides • Dependent on notes • Lack audience adaptation of content |
| Organization | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive. | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation. | Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is not observable within the presentation. |
| Delivery | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative. | Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) detract from the understandability of the presentation, and speaker appears uncomfortable. |

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| <p>Use Information Effectively to Accomplish a specific purpose</p> | <p>Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth</p> | <p>Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.</p> | <p>Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.</p> | <p>Communicates information from sources. The information is fragmented and/or used inappropriately (misquoted, taken out of context, or incorrectly paraphrased, etc.), so the intended purpose is not achieved.</p> |
| <p>Determine the Extent of Information</p> | <p>Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.</p> | <p>Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.</p> | <p>Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.</p> | <p>Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.</p> |