



College of Sciences
Academic Learning Compacts

Chemistry - B.S.

Discipline Specific Knowledge, Skills, Behavior and Values

1. Graduates of our program will have knowledge of chemistry which compares favorably to that of students nationally. Evaluation of this outcome will be based on knowledge and critical thinking and reasoning in the common sub disciplines of chemistry: analytical, biochemistry, inorganic, organic and physical chemistry.
2. Graduates will critically read the chemical literature, grasp and outline the pertinent information. Students will demonstrate their ability to use knowledge and skills in the discipline as well as critical thinking skills by performing literature research and to organize pertinent points in the preparation process of the departmental seminar.
3. Graduates will be prepared to make technical presentations suitable for professional audiences.
4. Graduates will have the chemical knowledge, laboratory skills, and analytical ability to conduct substantial laboratory research projects.
5. Students will have knowledge of Organic Chemistry which compares favorably to that of students nationally.
6. Students of our program will have knowledge of Freshman Chemistry which compares favorably to that of students nationally.
7. Students of our program will have knowledge of Physical Chemistry which compares favorably to that of students nationally.

Critical Thinking

1. Graduates of our program will have knowledge of chemistry which compares favorably to that of students nationally. Evaluation of this outcome will be based on knowledge and critical thinking and reasoning in the common sub disciplines of chemistry: analytical, biochemistry, inorganic, organic and physical chemistry.
2. Graduates will critically read the chemical literature, grasp and outline the pertinent information. Students will demonstrate their ability to use knowledge and skills in the discipline as well as critical thinking skills by performing literature research and to organize pertinent points in the preparation process of the departmental seminar.
3. Graduates will have the chemical knowledge, laboratory skills, and analytical ability to conduct substantial laboratory research projects.

Communication

1. **Students will demonstrate mastery of written communication skills appropriate to chemistry research.**
2. **Graduates will be prepared to make technical presentations suitable for professional audiences.**

Assessment of Chemistry - B.S. Outcomes

These outcomes will be assessed using a variety of assessment methods, including:

- **Tests**
- **Laboratory reports**
- **Seminar development**
- **Papers**
- **Projects**
- **Presentations**