**SOU Chemistry Program Skill/Knowledge Outcomes**

**March 2016**

**Skill 1: Chemical Information and Technology.**

Students will demonstrate competency in the theory, application, and use of spectroscopic, chromatographic, electrochemical, and analytical instrumentation.

**Means of assessment:**

Standardized examination in instrumental chemistry as developed by the American Chemical Society Examination Committee.

**Skill 2: Information Literacy**

Students will be able to access, evaluate, and use information resources in an effective, ethical, and balanced manner.

 **Means of assessment:**

 **Course Performance**: Students will adequately perform all assignments in CH 314, 315, and 316.

**Knowledge 1-5: Subject Mastery**

Students will demonstrate mastery of biochemistry, organic, analytical, physical, and inorganic chemistry.

**Means of assessment:**

Standardized examinations in biochemistry, organic, analytical, physical, and inorganic chemistry as developed by the American Chemical Society Examination Committee.

**Knowledge 6: Synthesis**

Students will be able to synthesize chemical knowledge across sub-disciplines of the chemical sciences and test the integration of that knowledge in applied situations.

 **Means of assessment:**

Graduating seniors are given the Diagnostic of Undergraduate Chemistry Knowledge (DUCK) examination developed by the American Chemical Society Examination Committee