OWG 9 Science Approved Recommendations

1. **Recommends no changes the Forensic catalog descriptions.**

2. **Recommends courses that are common to both DSC and ASU in Area F Foundations:**

   ISCI 2001 - Foundations of Life/Earth Science (3)

   An integrated overview of the core Life and Earth Science content covered in the K-5 Georgia Performance Standards. Topics include the Solar System, Earth Processes, Cells and Cellular Processes, Characteristics and Classification of Living Organisms, Biodiversity, Ecology and the Natural History of Georgia. Students will gain conceptual understanding through Inquiry-Oriented, Activity-Based pedagogical strategies in order to have experience learning science content in the ways they will be expected to teach in the future. There is a laboratory component. Prerequisite: Teacher Education major status or permission from the instructor.

   Offered: Fall, Spring and Summer (as needed).

   ISCI 2002 - Foundations of Physical Science (3)

   An integrated overview of the core Physical Science content covered in the K- 5 Georgia Performance Standards. Topics include the Energy, light, heat, sound, electricity, magnetism, matter, periodic table, periodic trends, chemical reactions and conservation of energy and matter. Students will gain conceptual understanding through Inquiry-Oriented, Activity-Based pedagogical strategies in order to have experience learning science content in the ways they will be expected to teach in the future. There is a laboratory component. Prerequisite: Teacher Education major status or permission from the instructor.

   Offered: Fall, Spring and Summer (as needed).

3. **Recommends that Chemistry courses common to both institutions have the following course numbers, names, and descriptions:**

   CHEM 1151K, **Survey of Chemistry I**, "This course is the first in a two-semester sequence covering elementary principles of general and organic chemistry and biochemistry designed for allied health profession majors. Topics to be covered include elements and compounds, chemical equations, nomenclature, and molecular geometry. Laboratory exercises will supplement the lecture material.

   Prerequisite(s): Completion or exemption of all learning support and English requirements; MATH 0099, MATH 0987, MATH 0989, or satisfactory math scores to place into co-requisite remediation or higher."

CHEM 1211K, Principles of Chemistry I, "First course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science plans of study. Topics to be covered include composition of matter, nomenclature, stoichiometry, solution chemistry, gas laws, thermochemistry, quantum theory and electronic structure, periodic relations, and bonding. Laboratory exercises supplement the lecture material.

Prerequisites: Completion or exemption of all learning support requirements.

Corequisites: MATH 1111 or satisfactory math scores to place into MATH 1112 or higher."

CHEM 1212K, Principles of Chemistry II, "Second course in a two-semester sequence covering the fundamental principles and applications of chemistry designed for science plans of study. Topics include molecular structure, intermolecular forces, properties of solutions, reaction kinetics and equilibria, thermodynamics, and electro-and nuclear chemistry. Laboratory exercises supplement the lecture material.

Prerequisite: CHEM 1211K."

CHEM 2301K, Organic Chemistry I, "This course will cover the stereochemistry, properties, as well as methods of preparation and mechanisms of the principle classes of carbon compounds. Laboratory instruction will include basic techniques for preparation, purification and identification of organic compounds. Laboratory exercises supplement the lecture material.

Prerequisite: CHEM 1212K."

CHEM 2302K, Organic Chemistry II, "This is a continuation of CHEM 2301K, a systematic study of the reactivity of organic compounds as well as their identification by spectroscopy. Laboratory exercises supplement the lecture material.

Prerequisite: CHEM 2301K."

NOTE: All courses will remain 4 credit hours:

4. Recommends that all laboratory science courses have the lecture and laboratory portions consolidated into a single course.