CHEMISTRY B.S.

	Core Comptency	Intellectual Skills	Specialized Knowledge	Applied Learning	Broad Integrative Learning	Civic and Global
1. Apply key concepts and principles in a. analytical chemistry b. biochemistry c. inorganic chemistry d. organic chemistry e. physical chemistry			1			
2. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.			1	1		
3. Participate in the life of the Chemistry Department by involvement in one or more of the following areas: research, chemistry club, and/or various positions of responsibility serving as graders, tutors, stockroom workers and/or teaching assistants.				1		
4. Be prepared for post graduate studies or a science-related career.			1	1		
NOTE: IL, OC, WC, QR, CT measured in CHE495	IL, OC, WC, QR, CT					

BIOLOGY-CHEMISTRY B.S.

	Core Comptency	Intellectual Skills	Specialized Knowledge	Applied Learning	Broad Integrative Learning	Civic and Global
1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, and organismal.			1			
2. Apply key concepts and principles in quantitative analysis, biochemistry, bioinorganic chemistry, organic chemistry, and physical chemistry (thermodynamics and kinetics).			1			
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.			1	1		
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.				1		
5. Develop a rationally defensible integration of science and faith.	WC, IL, CT	1			1	
6. Be prepared for post-graduate studies or science-related careers.			1	1		
NOTE: OC, QR measured separately in BIO497 & CHE 495	OC, QR					

ENVIRONMENTAL SCIENCE B.S.

	Core Comptency	Intellectual Skills	Specialized Knowledge	Applied Learning	Broad Integrative Learning	Civic and Global
1. Demonstrate an understanding of the process of science and of the concepts and theories of biology across a broad range of organizational levels: molecular, cellular, organismal, and ecological (population, community, ecosystem).			1			
2. Apply key concepts and principles in analytical chemistry including quantitative and instrumental analysis.			1			
3. Use standard instrumentation and laboratory equipment to conduct scientific experiments and perform chemical characterization and analyses.			1	1		
4. Participate in the life of the departments of Biology and/or Chemistry by involvement in science clubs and/or in various positions of responsibility such as graders, tutors, and teaching assistants.				1		
5. Develop a rationally defensible integration of science and faith, particularly with regard to environmental stewardship.	WC, IL, CT	1			1	
6. Be prepared for post-graduate studies or science-related careers.			1	1		
NOTE: OC, QR measured separately in BIO497 & CHE 495	OC, QR					

Core Competency Codes: CC-IL, CC-OC, CC-WC, CC-QR, CC-CT
PLO Codes: PLO 1, PLO 2, PLO 3, ….

DQP - DEGREE QUALIFICATION PROFILE – CATEGORIES OF LEARNING

Intellectual Skills

Intellectual Skills define proficiencies that transcend the boundaries of particular fields of study: analytic inquiry, use of information resources, engaging diverse perspectives, ethical reasoning, quantitative fluency, and communicative fluency.

Specialized Knowledge

What students in any specialization should demonstrate with respect to the specialization, often called the major field. All fields call more or less explicitly for proficiencies involving terminology, theory, methods, tools, literature, complex problems or applications and cognizance of limits.

Applied and Collaborative Learning

Applied learning suggests what graduates can do with what they know. This area focuses on the interaction of academic and non-academic settings and the corresponding integration of theory and practice, along with the ideal of learning with others in the course of application projects.

Broad and Integrative Knowledge

Students integrate their broad learning by exploring, connecting and applying concepts and methods across multiple fields of study to complex questions—in the student's areas of specialization, in work or other field-based settings and in the wider society.

Civic and Global Learning

Civic and Global Learning proficiencies rely principally on the types of cognitive activities (describing, examining, elucidating, justifying) that are within the direct purview of the university, but they also include evidence of civic activities and learning beyond collegiate settings. These proficiencies reflect the need for analytic inquiry and engagement with diverse perspectives.