## Chemistry (Doctor of Philosophy)

Administrative Unit:	Department of Chemistry
College/School:	College of Sciences
Concentrations:	
Options:	

Overview
The Ph.D. program in Chemistry

## **Program Objectives**

# Ph.D. in Chemistry graduates will:

- Acquire an advanced understanding of concepts in areas related to their thesis research and area of specialty and will be capable of 1) applying these concepts, 2) analyzing new topics or material, 3) composing or constructing new ideas, and 4) appraising and evaluating his/her own work and the work of others.
- Acquire an advanced understanding of concepts in physical chemistry and a
  minimum of 2 subdisciplines outside of physical chemistry (Analytical,
  Biochemistry, Inorganic, Organic, Materials, Medicinal) through completion of
  graduate level coursework. An advanced understanding includes the ability to
  apply knowledge and analyze information.
- Develop skills to be competent instructors of undergraduate students.
- Be able to explain in technical written and oral formats an advanced understanding of a current topic in the chemical literature.

### **Program Admission**

In addition to meeting the <u>minimum standards for admission to the Graduate School</u>, applicants to the program must provide satisfactory scores on the Graduate Record Examination (GRE), submit a statement of purpose, and have 3 letters of recommendation submitted.

#### **Program Requirements**

All Ph.D. Chemistry students will complete 60 graduate credit hours. After admission students' knowledge of chemistry major fields will be assessed. Results of the examinations will be used to determine coursework requirements. Within two years of admission to the program students must complete the qualifying examination by passing three separate examinations with a maximum of nine

attempts allowed. Prior to the conclusion of the students' fourth semester, they must prepare and present one literature seminar. In the fifth semester of study, a written and oral general examination must be completed. Finally, all students must complete a publicly presented dissertation.

Course Requirements		
Minimum Credit Hours:	60 hours	
Maximum Transfer Credits: (See <u>Graduate School policy on Transfer of Credit</u> )	20 hours	
Minimum Credits at 6000-level	51 hours	
Core Requirements:	9 hours in one division of chemistry, 6 hours from two other divisions, 1 hour each of CHEM 6090, 6091, 6092, 6093, 6 hours CHEM 6095, 32 hours of CHEM 7050	

Time Limit	See Graduate School policy on time
	<u>limits for degrees</u> .