

## Chemistry Courses

**CHEM106 - Chemistry and Society** 106-3 Chemistry and Society. (University Core Curriculum) [IAI Course: P1 903L] Exploration of the many implications that chemistry has upon modern society. Topics include air and water quality, global warming, acid rain, fossil, solar and nuclear fuels, nutrition and drugs. Three lectures per week except that every other week a three-hour lab is substituted for one of the lectures that week. Lab fee: \$60.

**CHEM125 - Prep General Chemistry** 125-3 Preparatory General Chemistry. Preparation for general chemistry (CHEM 200). This course is designed to strengthen background knowledge and skills necessary for success in CHEM 200. Topics include unit conversions, periodic table, chemical formulas, chemical reactions, and stoichiometry, with a focus on mathematical problem solving, interpreting data from graphs and tables, and chemical reasoning.

**CHEM140A - Chemistry** 140A-4 Chemistry. (University Core Curriculum) [IAI Course: P1 902L] This is the first semester of a two-semester sequence of general, organic and biological chemistry designed to meet the needs of nursing, dental hygiene, physical therapy, other allied health programs, agriculture, forestry and other majors with comparable requirements. This course is not applicable to a major in chemistry. CHEM 140A can serve as a preparation for CHEM 200 for students without a year of high school chemistry or for those who feel their background is inadequate. Three lectures and one three-hour laboratory per week. Pre- or Co-requisite: MATH 106, 108, 109, 110, 111, 125, 139, 140, 141 or 150. CHEM 140A satisfies University Core Curriculum Science Group I requirement in lieu of 106. Lab fee: \$60.

**CHEM140B - Chemistry** 140B-4 Chemistry. This is the second semester of a two semester sequence of general, organic and biological chemistry designed to meet the needs of nursing, dental hygiene, physical therapy, other allied health programs, agriculture, forestry and other majors with comparable requirements. This course is not applicable to a major in chemistry. CHEM 140A can serve as a preparation for CHEM 200 for students without a year of high school chemistry or for those who feel their background is inadequate. Three lectures and one three-hour laboratory per week. Pre- or Co-requisite: MATH 106, 108, 109, 110, 111, 125, 139, 140, 141 or 150. CHEM 140A satisfies University Core Curriculum Science Group I requirement in lieu of 106. Lab fee: \$60.

**CHEM173 - Forensic Science** 173-3 Introduction to Forensic Science. This course is designed to provide an introduction to forensic science and criminalistics and the techniques used in the modern forensic laboratory for the analysis of common types of physical evidence encountered at crime scenes. Topics include the recognition, identification, and evaluation of physical evidence such as DNA, hairs, fibers, drugs, blood, glass, soil, firearms, fingerprints, and documents. Three lectures per week. No prerequisite.

**CHEM180 - Chemistry of Beer** 180-2 The Chemistry of Beer and Brewing. The course covers the science and chemistry of beer and brewing. The history of beer and brewing will be introduced to follow the evolution of beer as a food and beverage, including how beer has impacted society and how brewing has been affected by society. The chemistry of the four basic ingredients of beer (water, malt, hops, and yeast) will be explored, as well as the chemistry of the brewing process. The various styles of beer will be introduced and discussed with respect to how the styles can be achieved based on the chemistry of the ingredients and process. Home brewing and commercial brewing will be compared. The course does not presume a background in chemistry and various chemical concepts will be introduced on an as needed basis.

**CHEM181 - Chemistry of Beer Lab** 181-1 The Chemistry of Beer and Brewing Lab. The laboratory complement to CHEM 180, The Chemistry of Beer and Brewing. The laboratory will cover various aspects of beer and brewing in a hands-on experiential environment. A major component will be guided tasting sessions of the various style categories of beer. Students will participate in brewing beer from base ingredients using various brewing techniques. Experiments conveying basic biology, chemistry and physical science concepts will be conducted. In addition, spectroscopic and chromatographic methods

will be used to analyze flavor and ingredient components in beer. Special tours may also be arranged in regional breweries and hop yards. Lab fee: \$90.

**CHEM200 - Intro to Chemical Principles** 200-3 Introduction to Chemical Principles. (University Core Curriculum course) [IAI Course: CHM 911] [IAI Course: P1 902] First-semester chemistry for students in science, pre-professional, engineering or technology programs. Atomic structure, molecular structure, bonding, solutions, stoichiometry, gases, liquids and solids. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite: one year of high school chemistry or CHEM 140A or ACT Science score of at least 22; Prerequisite or Co-requisite: MATH 106, 108, 109, 111, 140 or 150; Concurrent enrollment in CHEM 201 and CHEM 202. With 201 satisfies University Core Curriculum Science Group I requirement in lieu of 106.

**CHEM201 - General Chemistry Lab I** 201-1 General Chemistry Laboratory I. (University Core Curriculum course) [IAI Course: P1 902L] [IAI Course: CHM 911] Synthesis and exploration of the properties of compounds and elements. One three-hour laboratory per week. Prerequisite: completion of or concurrent enrollment in Chemistry 200. If Chemistry 200 is dropped, the laboratory course must also be dropped. With Chemistry 200 satisfies University Core Curriculum Science Group I requirement in lieu of 106. Lab fee: \$60.

**CHEM202 - Intro Chemistry Workshop** 202-1 Introductory Chemistry Workshop. Supervised computer workshop meets one hour weekly for students in Introduction to Chemical Principles. Concurrent enrollment in CHEM 200.

**CHEM205 - Atoms & Molecules CHEM Majors** 205-3 Atoms and Molecules for CHEM Majors. (University Core Curriculum) Chemistry of Atoms and Molecules for CHEM Majors. First semester of the accelerated chemistry course for chemistry majors and advanced students in science. Atoms, quantum theory, atomic structure, chemical bonds, molecular structure, and chemical reactions. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite: declared Chemistry major or ACT Science score of at least 25; Prerequisite or Co-requisite: MATH 106, 108, 109, 111 or 150. Concurrent enrollment in CHEM 201 and CHEM 207.

**CHEM205H - Atoms & Molecules Honors** 205H-3 Chemistry of Atoms and Molecules for Honors. (University Core Curriculum) First semester of the accelerated chemistry course for chemistry majors and advanced students in science. Atoms, quantum theory, atomic structure, chemical bonds, molecular structure, and chemical reactions. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite: declared Chemistry major or ACT Science score of at least 25; Prerequisite or Co-requisite: MATH 106, 108, 109, 111 or 150. Concurrent enrollment in CHEM 201 and CHEM 207H. With 201 satisfies University Core Curriculum Science Group I requirement in lieu of 106.

**CHEM207 - Atoms & Molecules Workshop** 207-1 Atoms and Molecules Workshop for CHEM Majors. (University Core Curriculum) Supervised computer workshop meets one hour weekly for students in Chemistry of Atoms and Molecules. Concurrent enrollment in CHEM 205.

**CHEM207H - Atoms & Molecules Workshop Hon** 207H-1 Atoms and Molecules Workshop for Honors. (University Core Curriculum) Supervised computer workshop meets one hour weekly for students in Chemistry of Atoms and Molecules. Concurrent enrollment in CHEM 205H.

**CHEM210 - General and Inorganic Chem** 210-3 General and Inorganic Chemistry. [IAI Code: CHM 912] Second semester chemistry for science, engineering or pre-professional majors. Rates of reaction, chemical equilibrium, acid-base equilibria, pH electrochemistry, transition metals, properties of inorganic compounds, nuclear chemistry and organic chemistry. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite: MATH 106, 108, 109, 111, 140 or 150; C or better in CHEM 200, 201. Concurrent enrollment in CHEM 212.

**CHEM211 - General Chemistry Lab II** 211-1 General Chemistry Laboratory II. [IAI Code: CHM 912] Continued synthesis and exploration of properties of compounds and elements. Prerequisite: C or better in CHEM 200, 201; completion of or concurrent enrollment in CHEM 210. If CHEM 210 is dropped, CHEM 211 must also be dropped. Lab fee: \$60.

**CHEM212 - General Chemistry Workshop** 212-1 General Chemistry Workshop. Supervised computer workshop meets one hour weekly for students in General and Inorganic Chemistry. Concurrent enrollment in CHEM 210.

**CHEM215 - Chemistry of Matter** 215-3 Chemistry of Matter for CHEM Majors. (University Core Curriculum) Second semester of the accelerated chemistry course for chemistry majors and advanced students in science. Chemical properties of matter, kinetics, equilibrium, solution chemistry, thermodynamics, electrochemistry, nuclear chemistry and transition metals. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite: MATH 106, 108, 109, 111 or 150 or concurrent enrollment; C or better in CHEM 205H or declared Chemistry major and A grade in CHEM 205; Concurrent enrollment in CHEM 211 and CHEM 217.

**CHEM215H - Chemistry of Matter for Honors** 215H-3 Chemistry of Matter for Honors. (University Core Curriculum) Second semester of the accelerated chemistry course for chemistry majors and advanced students in science. Chemical properties of matter, kinetics, equilibrium, solution chemistry, thermodynamics, electrochemistry, nuclear chemistry and transition metals. Three lectures per week. Students are required to attend a weekly one hour supervised computer workshop. Prerequisite or Co-requisite: MATH 106, 108, 109, 111 or 150; C or better in CHEM 205H or declared Chemistry major and a grade of C or better in CHEM 205; Concurrent enrollment in CHEM 211 and CHEM 217H.

**CHEM217 - Chem of Matter Workshop** 217-1 Chemistry of Matter Workshop for CHEM Majors. (University Core Curriculum) Supervised computer workshop meets one hour weekly for students in Chemistry of Matter. Concurrent enrollment in CHEM 215.

**CHEM217H - Chemistry of Matter Workshop H** 217H-1 Chemistry of Matter Workshop for Honors. (University Core Curriculum) Supervised computer workshop meets one hour weekly for students in Chemistry of Matter. Concurrent enrollment in CHEM 215H.

**CHEM296 - Introduction to Research** 296-1 to 2 Introduction to Research. Introduction to research under the direction and supervision of a faculty advisor. Safety training is required. Special approval needed from the instructor.

**CHEM311 - Intermediate Inorganic Chem** 311-3 Intermediate Inorganic Chemistry. Foundational platform to understand the principles of inorganic chemistry and properties of inorganic compounds. The primary focus of this course will be on bonding and periodicity encompassing the broader aspect of trends in chemistry of elements. This course will cover acid-base and redox chemistry, and the chemistry of inorganic chain, ring cages and clusters. Prerequisites: CHEM 200 and CHEM 210 with grades of C or better.

**CHEM330 - Quantitative Analysis** 330-5 Quantitative Analysis. A one-semester course in analytical chemistry that emphasizes quantitation by wet-chemical methods and modern instrumentation. Topics include statistics, sampling, gravimetry, multiple chemical equilibria, titrimetry, potentiometry, voltammetry, spectrophotometry and chromatography. Three lectures and two laboratories per week. Ability to solve algebraic equations and use of logarithms essential. Prerequisite: MATH 109, 111, 150 or 250; C or better in CHEM 210, 211. Lab fee: \$60.

**CHEM339 - Intro to Organic Chemistry** 339-3 Introduction to Organic Chemistry. An introduction to the chemistry of carbon-based compounds. Intended to introduce students to functional groups; their structure properties and reactivity. For students requiring only one semester of organic chemistry. Three lectures per week. Prerequisite: C or better in CHEM 210, 211. Recommended: concurrent enrollment in CHEM 341.

**CHEM340 - Organic Chemistry I** 340-3 Organic Chemistry I. The first part of a two semester introduction to organic chemistry. This course will introduce basic nomenclature, bonding, stereochemistry, reactivity and the spectroscopic methods common to organic chemistry. Three lectures per week. Prerequisite: C or better in CHEM 210, 211.

**CHEM341 - Organic Chemistry Lab I** 341-2 Organic Chemistry Laboratory I. An introductory lab course based upon a problem-solving approach to organic chemistry. Students will identify and derivatize

unknowns using modern organic techniques. One one-hour lecture and one four-hour laboratory per week. Prerequisite: C or better in CHEM 210, 211; 339 or 340 taken concurrently. Lab fee: \$60.

**CHEM350 - Biological Chemistry** 350-3 Introduction to Biological Chemistry. Fundamental concepts in Biological Chemistry include biomolecular structure, enzyme catalysis, metabolism and gene expression. Three lectures per week. Prerequisite: C or better in CHEM 210 and 339 or 340; C or better in one semester biological sciences course (not University Core Curriculum course). Offered spring semester only.

**CHEM351 - Biochemistry Laboratory** 351-2 Biochemistry Laboratory. A one semester biochemistry laboratory covering techniques and laboratory procedures; isolation, purification and characterization of amino acids, peptides, proteins, nucleic acids, lipids and cofactors; spectroscopic and chromatographic analysis of biomolecules; study of protein-ligand interactions; enzyme kinetics. One one-hour lecture and one four-hour laboratory per week. Prerequisites: CHEM 210, 211, 339 or 340, 341. Prerequisite or co-requisite: CHEM 350 or 451B. Offered spring semester. Lab fee: \$60.

**CHEM360 - Physical Chemistry** 360-3 Classical Physical Chemistry. An introduction to chemical, statistical thermodynamics and kinetics. Prerequisite: Mathematics 250; C or better in CHEM 210, 330 or concurrent enrollment. Mathematics 221 or 305 is recommended as prerequisite or concurrent enrollment. Offered fall semester only.

**CHEM361 - Physical Chem Lab I** 361-1 Physical Chemistry Laboratory I. Experiments relating to topics covered in 360. Prerequisite: CHEM 360 or concurrent enrollment. One three-hour laboratory per week. Offered fall semester only. Lab fee: \$60.

**CHEM386A - Problem Solving Workshop** 386A-1 Problem Solving Workshop. A two semester workshop sequence for chemistry majors. One two-hour workshop per week per semester. Introduction to problem solving strategies with examples and practice problems. Prerequisite: Chemistry 200. Restricted to chemistry major.

**CHEM386B - Problem Solving Workshop** 386B-1 Problem Solving Workshop. A two semester workshop sequence for chemistry majors. One two-hour workshop per week per semester. Advanced problem solving with general applications. Prerequisite: CHEM 386A.

**CHEM396 - Undergraduate Research** 396-1 to 2 Undergraduate Research. Research under the direction and supervision of a faculty advisor culminating in a written report. Safety training is required. Prerequisite: one semester of chemistry with laboratory experience. Special approval needed from the instructor.

**CHEM410 - Inorganic Lab** 410-2 Inorganic Synthesis and Characterization Laboratory. Introduction to synthesis techniques and characterization methods of inorganic compounds. One four-hour lab per week. Not for graduate credit. Prerequisite: completion of or concurrent enrollment in CHEM 411. Offered spring semester only. Lab fee: \$60.

**CHEM411 - Advanced Inorganic Chemistry** 411-3 Advanced Inorganic Chemistry. Inorganic chemistry covering bonding and structure, polyatomic systems, coordination compounds, and the chemistry of elements. Three lectures per week. Prerequisites: CHEM 311, 360, and 361 with grades of C or better. Suggested MATH 221.

**CHEM431 - Environmental Chemistry** 431-3 Environmental Chemistry. Chemical principles applied to the environment and environmental problems. Chemical kinetics, thermodynamic and equilibrium concepts as they relate to the atmosphere, water and soil will be discussed to include current problems of pollutants, pollutant evaluation and pollutant remediation. Discussion of methods for the chemical analysis of environmental samples will also be included. Prerequisite: C or better in CHEM 330 and 340.

**CHEM434 - Instrumental Analysis** 434-2 to 4 Instrumental Analytical Chemistry. Theory and practice of instrumental measurements, including emission and absorption spectroscopic, capillary electrophoretic and chromatographic methods. Two lectures and two three-hour laboratories per week for four credits. Enrollment for two credit hours is restricted to graduate students in the School of Chemical and Biomolecular Sciences who are advised to take instrumental analysis. Prerequisite: C or better in CHEM 330. Offered fall semester only. Laboratory fee: \$60.

**CHEM439 - Forensic Chemistry** 439-3 Forensic Chemistry. A one-semester course in the analysis of forensics samples. Topics include sample collection and preservation, chain of custody, data validation and reports, and analytical methods which may include (as time permits) chromatography, mass spectroscopy, fluorescence and absorbance spectroscopy, fingerprint identification, and scanning electron and light microscopy. One lecture and one six-hour laboratory meeting per week. Prerequisite: C or better in CHEM 330 and 434. Offered spring semester only. Lab fee: \$60.

**CHEM442 - Organic Chemistry II** 442-3 Organic Chemistry II. This is a continuation of 340 emphasizing topics that were not covered in the first semester. Topics will include the chemistry of aromatic compounds, dienes and other carbon-carbon bond forming reactions. Advanced topics such as polymers and biomolecules may also be covered. Three lectures per week. Prerequisite: C or better in CHEM 340, 341; concurrent enrollment in 443 is recommended. Offered spring semester only.

**CHEM443 - Organic Chemistry Lab II** 443-2 Organic Chemistry Laboratory II. A second organic laboratory course based upon a synthetic approach. Students will learn modern synthetic organic chemistry techniques including modern spectroscopic techniques. One one-hour lecture and one four-hour laboratory per week. Prerequisite: C or better in CHEM 340, 341, 442, or concurrent enrollment in 442. Offered spring semester only. Lab fee: \$60.

**CHEM444 - Intermediate Organic Chem** 444-3 Intermediate Organic Chemistry. A transitional course between introductory and graduate level chemistry. The chemistry of carbon compounds based upon a mechanistic approach will be discussed. Three lectures per week. Prerequisite: C or better in CHEM 340 and 442. Offered fall semester only.

**CHEM451A - Biochemistry** 451A-3 Biochemistry. (Same as BCHM 451A and MBMB 451A) First half of the 451 A,B two semester course. Introduction to structure and function of biomolecules including nucleic acids, proteins, sugars, polysaccharides, lipids and membranes, biochemical techniques, expression of genetic information, signal transduction and transport through membranes. Prerequisites: CHEM 340 and CHEM 342 or 442, or equivalents with grades of C- or better.

**CHEM451B - Biochemistry** 451B-3 Biochemistry. (Same as BCHM 451B and MBMB 451B) Second half of 451A,B two semester course. Basic kinetics, enzyme kinetics, enzyme inhibitors, regulation of enzymes, oxidation-reduction, high energy bonds, carbohydrate metabolism, aerobic/anaerobic metabolism, lipid metabolism, nitrogen metabolism, hormonal control of metabolism. Prerequisite: MBMB 451A or BCHM 451A or CHEM 451A or equivalent with a grade of C- or better.

**CHEM452 - Advanced Biochemistry** 452-3 Advanced Biological Chemistry. Advanced study of biological chemistry including the structure-function relationship in proteins, the mechanism of enzyme reactions and the biochemical basis of gene expression, signal transduction, nerve impulses, molecular motors and other physiological processes. For graduate students, this course may be taken to meet deficiencies in biochemical knowledge, but will not meet the formal coursework requirements for the master or doctoral level degrees. Prerequisite: C or better in CHEM 340, 341, 350.

**CHEM453 - Advanced Biochemistry Lab** 453-2 Advanced Biochemistry Laboratory. A one semester advanced biochemistry laboratory covering techniques and laboratory procedures for the isolation, purification and characterization of biomolecules. Two three-hour laboratories per week. Prerequisites: C or better in CHEM 350 and CHEM 351. Lab fee: \$60.

**CHEM456 - Biophysical Chemistry** 456-3 Biophysical Chemistry. (Same as MBMB 456 and BCHM 456) A one-semester course in Biophysical Chemistry intended for biochemists and molecular biologists. Emphasis will be on solution thermodynamics, kinetics and spectroscopy applied to biological systems. Prerequisites: CHEM 340 and CHEM 342 or 442, MATH 141 or 150, MBMB 451A or BCHM 451A or CHEM 451A, or equivalents.

**CHEM460 - Quantum Mechanics** 460-3 Quantum Mechanics and Spectroscopy. An introduction to quantum mechanics and spectroscopy. Prerequisite: MATH 250; C or better in CHEM 360. MATH 221 or 305 is recommended as prerequisite or concurrent enrollment. Offered spring semester only.

**CHEM463 - Physical Chem Lab II** 463-1 Physical Chemistry Laboratory II. Experiments relating to topics covered in 460. Prerequisite: C or better in CHEM 460 or concurrent enrollment. One three-hour laboratory per week. Offered spring semester only. Lab fee: \$60.

**CHEM468 - Application Symmetry to Chem** 468-3 Application of Symmetry to Chemistry. The concepts of symmetry elements, groups and character tables will be taught. Symmetry will be applied to molecules in order to simplify and characterize their wave functions and vibrational frequencies. Prerequisite: C or better in CHEM 460. Offered spring semester in odd years only.

**CHEM479 - Materials Chemistry** 479-3 Principles of Materials Chemistry. Introduction to fundamental concepts of materials chemistry. Synthesis, characterization, processing and applications of different materials including solids, polymers, ceramics and molecularly designed materials. Prerequisite: CHEM 360, 411 or concurrent enrollment. Offered fall semester in odd years only.

**CHEM489 - Special Topics in Chemistry** 489-1 to 3 Special Topics in Chemistry. Special approval needed from the instructor and chair.

**CHEM490 - Undergraduate Seminar** 490-1 Undergraduate Seminar. Current topics in chemistry covered through literature review, presentations, reports of ongoing research and discussions. Prerequisite/Co-requisite: CHEM 296, CHEM 396 or CHEM 496. Special approval needed from the instructor.

**CHEM490H - Honors Seminar** 490H-1 Honors Seminar. Current topics in chemistry covered through literature review, presentations, reports of ongoing research and discussions. Pre/Co-requisite: CHEM 496H. Special approval needed from the instructor.

**CHEM496H - Honors Research** 496H-1 to 6 Honors Research. Independent research under the direction of a faculty advisor culminating in a written report. Safety training is required. Prerequisite: C or better in CHEM 330. Special approval needed from the instructor and a minimum 3.0 grade point average in all chemistry course work.

**CHEM499H - Honors Thesis** 499H-3 Honors Thesis. Preparation of a well-written honors thesis under the supervision of a faculty advisor based on an honors research project. The written thesis will be submitted to the faculty advisor and the department. A public presentation of the honors thesis research is required as a seminar or poster presentation. A proposal for honors research must be submitted to the department one year prior to completion of the honors thesis. Pre/Co-requisite: CHEM 496H.

## Chemistry Faculty

**Bancroft, Senetta F.**, Assistant Professor, Ph.D., University of Akron, 2014.

**Deria, Pravas**, Assistant Professor, Ph.D., University of Pennsylvania, 2009.

**Du, Zhihua**, Associate Professor, Ph.D., University of Texas, 1997

**Gagnon, Keith T.**, Assistant Professor, Ph.D., North Carolina State University, 2007.

**Gao, Yong**, Associate Professor, Ph.D., University of Alberta, 1998.

**Ge, Qingfeng**, Professor, Ph.D., Tianjin University, 1991.

**Goodson, Boyd M.**, Professor, Ph.D., University of California, Berkeley, 1999.

**Kinsel, Gary R.**, Professor, Ph.D., University of Colorado-Boulder, 1989.

**Kohli, Punit**, Professor, Michigan State University 2000.

**Moran, Sean D.**, Assistant Professor, Ph.D., Columbia University, 2008.

**McCarroll, Matthew E.**, Professor, Ph.D., University of Idaho, 1998.

**Plunkett, Kyle N.**, Associate Professor, Ph. D., University of Illinois, 2005.

**Shamsi, Mohtashim H.**, Assistant Professor, Ph.D., University of Toronto, 2012.

**Suni, Ian I.**, Professor, Ph.D., Harvard University, 1992.

**Wang, Lichang**, Professor and Chair, Ph.D., University of Copenhagen, 1993.

## **Emeriti Faculty**

**Koropchak, John A.**, Professor, Emeritus, Ph.D., University of Georgia, 1980.

**Koster, David F.**, Professor, Emeritus, Ph.D., Texas A & M University, 1965.

**Smith, Gerard V.**, Professor, Emeritus, Ph.D., University of Arkansas, 1959.

**Trimble, Russell F.**, Professor, Emeritus, Ph.D., Massachusetts Institute of Technology, 1951.

**Tyrrell, James**, Professor, Emeritus, Ph.D., University of Glasgow, 1963.

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### **Southern Illinois University**

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### **Catalog Year Statement:**

Students starting their collegiate training during the period of time covered by this catalog (see bottom of this page) are subject to the curricular requirements as specified herein. The requirements herein will extend for a seven calendar-year period from the date of entry for baccalaureate programs and three years for associate programs. Should the University change the course requirements contained herein subsequently, students are assured that necessary adjustments will be made so that no additional time is required of them.