

**COLLEGE OF ARTS AND SCIENCES**  
**COURSE AND CURRICULUM CHANGES**

*to be considered* at the College faculty meeting

**February 13, 2003**

**Denison 113-A**

**4:00 p.m.**

**Undergraduate/Graduate**

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**532-6900**

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Please provide the sponsors of a proposed change with any information regarding fiscal or programmatic impact on your department, program, and/or students.

## COURSE CHANGES

### Division of Biology

**CHANGE:**     · **BIOL 198. Principles of Biology.** (4) I, II, S. An introductory course for majors and nonmajors focusing on plants, animals and microbes. Specific areas covered include biological molecules, cells, genetics, energy flow, physiology, ecology, and evolution. ~~Studio format incorporating lec., lab, and rec. elements in two two-hour sessions per week.~~

**TO:**           · **BIOL 198. Principles of Biology.** (5) I, II, S. An introductory course for majors and nonmajors focusing on plants, animals and microbes. Specific areas covered include biological molecules, cells, genetics, energy flow, physiology, ecology, and evolution. Two two-hour studio sessions incorporating lecture and lab elements and one hour of recitation per week.

**RATIONALE:** The Division of Biology, in our continuing efforts to improve and enhance student learning in our introductory course, Principles of Biology (Biology 198), proposes to add an additional contact hour to the course. Students currently participate in two two-hour studio sessions per week that incorporate elements of lecture, laboratory and recitation and earn 4 credit hours. We propose an additional class meeting per week that will serve two purposes: 1) it will allow us to offer an introductory overview to the material to be covered in upcoming studio meetings; 2) it will provide the opportunity for review of studio material prior to an examination. It has always been our goal in Principles of Biology to offer multiple opportunities for students to learn and to accommodate different learning styles (for details about the structure of the course, see <http://www.ksu.edu/biology/pob/>). The proposed recitations will increase the auditory learning component, and will allow us to give more help to students who have difficulty discerning the “big picture” aspects of a survey course such as this. Recitations will be taught, as are all of our studios, by regular and temporary faculty members.

We believe that the proposed change will benefit students based on our experience since 1998 in offering, on a purely voluntary basis, weekly or biweekly review sessions that help students integrate the material from the studio and from their text readings. We know from student surveys that they consider the review sessions to be extremely valuable in helping them to prepare for the biweekly examinations. But the current arrangement is voluntary, from the perspective of the Biology Division (whose faculty provide this out-of-class opportunity) and from the perspective of the students. Currently we estimate that only about a quarter to a third of the Biology 198 students take advantage of this opportunity to more fully learn the required material. Since this is a very effective way to enhance learning, particularly in our current studio format, we would like to ensure that more students participate and gain a better understanding of introductory biology.

We propose to offer four recitation sections (approximately 200 students each) per week; students will enroll in one of these sessions to be held during a regular class meeting time. These sessions will formalize and continue the functions of the present review sessions, as well as introducing the material to be covered in upcoming studio meetings. By having students officially enroll in a recitation, we will emphasize their importance and offer a fixed meeting time that students can plan upon attending.

Monday evening exams will continue; students will be excused from recitation on weeks following exams.

**EFFECTIVE DATE:** Fall 2003

**Department of Chemistry**

**CHANGE:** **CHM 350. General Organic Chemistry.** (3) I, II, S. A survey of types of organic reactions important to biological science, including pre-veterinary and certain agriculture and human ecology programs. Conc. enrollment in CHM 351 is urged. Three hours lec. a week. Pr.: CHM 230.

**TO:** **CHM 350. General Organic Chemistry.** (3) I, II, S. A survey of types of organic reactions important to biological science, including pre-veterinary and certain agriculture and human ecology programs. Conc. enrollment in CHM 351 is urged. Three hours lec. a week. Pr.: CHM 230 or CHM 250.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **CHM 566. Instrumental Methods of Analysis.** (3) I. Introduction to theory and practice of electrochemical methods, molecular and atomic spectroscopy, surface science, mass spectrometry, separation methods, and electronics in analytical chemistry. Three hours lec. a week. Pr.: ~~CHM 550~~ and CHM 500 or CHM 585.

**TO:** **CHM 566. Instrumental Methods of Analysis.** (3) I. Introduction to theory and practice of electrochemical methods, molecular and atomic spectroscopy, surface science, mass spectrometry, separation methods, and electronics in analytical chemistry. Three hours lec. a week. Pr.: CHM 531 and either CHM 500 or CHM 585.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **CHM 585. Physical Chemistry I.** (3) I. Elementary chemical thermodynamics and kinetic theory of gases. Three hours lec. a week. Pr.: ~~CHM 250 or CHM 371, MATH 222, PHYS 214, and CHM 531.~~

**TO:** **CHM 585. Physical Chemistry I.** (3) I. Elementary chemical thermodynamics and kinetic theory of gases. Three hours lec. a week. Pr.: CHM 350 or CHM 531, MATH 222, and PHYS 214.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **CHM 586. Physical Chemistry I Laboratory.** (2) I. Six hours lab a week. Pr.: ~~CHM 250 or CHM 371, CHM 585~~ or conc. enrollment.

**TO:** **CHM 586. Physical Chemistry I Laboratory.** (2) I. Six hours lab a week. Pr.: CHM 585 or conc. enrollment.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **CHM 595. Physical Chemistry II.** (3) II. Elementary quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics. Three hours lec. a week. Pr.: ~~CHM 598~~.

**TO:** **CHM 595. Physical Chemistry II.** (3) II. Elementary quantum chemistry, spectroscopy, statistical thermodynamics, and chemical kinetics. Three hours lec. a week. Pr.: CHM 350 or CHM 531, MATH 222, and PHYS 214.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **CHM 598. Physical Chemistry II Laboratory.** (2) II. Six hours lab a week. Pr.: ~~CHM 250 or CHM 371 and CHM 595~~ or conc. enrollment.

**TO:** **CHM 598. Physical Chemistry II Laboratory.** (2) II. Six hours lab a week. Pr.: CHM 595 or conc. enrollment.

**RATIONALE:** Implementation of proposed program changes in the Department of Chemical Engineering requires modification of chemistry prerequisites for several junior- and senior-level chemistry courses. These changes will have no effect of chemistry curricula and should have no adverse effect on other curricula within the University.

**EFFECTIVE DATE:** Fall 2003

### Department of English

**ADD:** **ENGL 076. Reading Skills for Non-native Speakers of English.** (3) I, II. An advanced course designed to improve reading skills and increase academic vocabulary of non-native speakers of English engaged in academic classes.

**RATIONALE:** In spring 1999, the ELP revised its curriculum to serve international students and faculty better. ENGL 077 (Written Communication Skills) was designed as a course to help students weak in the areas of reading and writing. However, since its inception, experience has shown that a number of student profiles have emerged. Some students are quite weak in grammar and writing but have good reading skills, and conversely, some students have good writing skills but are quite weak in reading. The class cannot adequately meet all of these needs. In spring 2002, we developed a special section of ENGL 077 focusing primarily on reading skills. There were 20 students enrolled. This semester we have again offered a special section and enrollment justifies offering the class. We would like to take the special section of ENGL 077 and offer it as a separate class since there is also a group of students who are extremely weak in both reading and writing skills and who would benefit from enrolling in both classes concurrently.

**EFFECTIVE DATE:** Summer 2003

**CHANGE:** **ENGL 079. ~~Oral Communication Skills for International Teaching Assistants.~~** (3) I, II. Introduction in speaking for non-native speakers of English to improve comprehension of non-simplified conversational English. Practice in asking for clarification, responding appropriately to requests, and encouraging interaction, as well as the pronunciation of troublesome English sounds and intonation patterns. Also a brief introduction to American culture, especially the American educational system. Pr.: Placement by the English Language Program.

**TO:** **ENGL 079. Pronunciation and Speaking Skills for Non-native Speakers of English.** (3) I, II. Introduction in speaking for non-native speakers of English to improve comprehension of non-simplified conversational English. Practice in asking for clarification, responding appropriately to requests, and encouraging interaction, as well as the pronunciation of troublesome English sounds and intonation patterns. Also a brief introduction to American culture, especially the American educational system. Pr.: Placement by the English Language Program.

**RATIONALE:** Originally, ENGL 079 was designed to meet the needs of international graduate students needing to pass the SPEAK test in order to teach. However, every semester sees a wide variety of people in the class: undergraduates, exchange students, visiting researchers, and graduate students not seeking a TA position. The name of the class no longer reflects the class and, in fact, causes confusion for students wanting to enroll in it.

**EFFECTIVE DATE:** Summer 2003

**ADD:** **ENGL 081. Advanced Integrated Skills.** (3) I, II. An advanced, combined-skills course to improve the reading, writing, and speaking skills of non-native speakers of English.

**RATIONALE:** During the last several semesters, a number of students have completed ENGL 077 and 078 but would like or need to continue to improve their English skills. In addition, exchange students like to enroll in English language classes while here in the U.S. to improve their English skills for personal enrichment. ENGL 077 and 078, while offering benefits to the students, are in reality at a more basic level than really meet these students' needs and offer instruction in only one skill. Such students want to improve their language in multiple skills areas-speaking, writing, and reading. ENGL 081 would offer exchange students, visiting researchers, and continuing students a chance to pursue their study of the English language. Enrollment would be voluntary. Placement would be made based on English Proficiency Test or TOEFL scores or in consultation with advisors and departments. The English Proficiency Test would not be required of the students at the end of the semester. Enrollment would be limited to non-native speakers of English.

**EFFECTIVE DATE:** Summer 2003

### **Department of Geography**

**ADD:** **GEOG 495. Capstone Seminar in Geography.** (2) I. An integrative capstone seminar requiring geography majors to synthesize knowledge and skills acquired in prior geography courses. Students pursue independent projects in consultation with a faculty member and present their finding in written and oral reports. The course exposes students to and helps prepare them for a variety of professional and scholarly opportunities available after graduation. Required of and restricted to geography undergraduate majors. Meets for two hours once a week.

**RATIONALE:** The course will be the culmination of the geography undergraduate major and required of all geography majors. It represents a response to exit interviews in which graduating geography seniors have indicated strong support for a class that would help students tie together concepts and knowledge gained in prior geography coursework. Members of the geography department faculty view the class as an opportunity to strengthen the geographic background of majors, thereby placing them in a stronger position as they enter the job market or begin graduate school. The course also provides an opportunity to assess student learning in the geography major.

**EFFECTIVE DATE:** Fall 2004

**Department of Physics**

**CHANGE:** **PHYS 562. Introduction to Quantum Mechanics.** (3) II. ~~An introduction to quantum mechanics.~~ Topics include solutions to the time independent Schrödinger equation, descriptions of one-electron and multi-electron atoms, electron spin and magnetic moments. Three hours of lec. per week. Pr.: PHYS 325, 522.

**TO:** **PHYS 662. Introduction to Quantum Mechanics.** (3) II. Topics include solutions to the time independent Schrödinger equation, descriptions of one-electron and multi-electron atoms, electron spin and magnetic moments. Three hours of lec. per week. Pr.: PHYS 325, 522.

**RATIONALE:** In recent years new content has been introduced into the course. This content is at a somewhat higher level than the material that had been taught previously. Thus, the 600 level is a better reflection of the level at which the course is being taught.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **PHYS 564. Thermodynamics and Statistical Physics.** (3) I. An introduction to thermodynamics developed from the concepts of statistical physics. Applications include the gas laws, concepts of heat and work, phase transitions, and kinetic theory with applications to statistical physics. Pr.: PHYS 522; MATH 240.

**TO:** **PHYS 664. Thermodynamics and Statistical Physics.** (3) I. An introduction to thermodynamics developed from the concepts of statistical physics. Applications include the gas laws, concepts of heat and work, phase transitions, and kinetic theory with applications to statistical physics. Pr.: PHYS 522; MATH 240.

**RATIONALE:** In recent years new content has been introduced into the course. This content is at a somewhat higher level than the material that had been taught previously. Thus, the 600 level is a better reflection of the level at which the course is being taught.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **PHYS 709. Applied Quantum Mechanics.** (3) I. A study of Schrödinger's theory of quantum mechanics and its application to one electron atoms, multielectron atoms, quantum statistics, spectra of molecules and selected topics in quantum excitations of solids, nuclear physics, and elementary particles. Three hours of lec. per week. Pr.: PHYS 562.

**TO:** **PHYS 709. Applied Quantum Mechanics.** (3) I. A study of Schrödinger's theory of quantum mechanics and its application to one electron atoms, multielectron atoms, quantum statistics, spectra of molecules and selected topics in quantum excitations of solids, nuclear physics, and elementary particles. Three hours of lec. per week. Pr.: PHYS 662.

**RATIONALE:** To be consistent with change in the course number of the prerequisite.

**EFFECTIVE DATE:** Fall 2003

**Department of Statistics**

**CHANGE:** **STAT 713. Applied Linear Statistical Models.** (3) I. Matrix-based regression and analysis of variance procedures at a mathematical level appropriate for a first-year graduate statistics major. Topics include simple linear regression, linear models in matrix form, multiple linear regression, model building and diagnostics, analysis of covariance, multiple comparison methods, contrasts, multifactor studies, blocking, subsampling, and split-plot designs. Pr.: Prior knowledge of matrix or linear algebra and one prior course in statistics. A student may not receive credit for both the STAT 704/705 sequence and STAT 713.

**TO:** **STAT 713. Applied Linear Statistical Models.** (4) I. Matrix-based regression and analysis of variance procedures at a mathematical level appropriate for a first-year graduate statistics major. Topics include simple linear regression, linear models in matrix form, multiple linear regression, model building and diagnostics, analysis of covariance, multiple comparison methods, contrasts, multifactor studies, blocking, subsampling, and split-plot designs. Pr.: Prior knowledge of matrix or linear algebra and one prior course in statistics. A student may not receive credit for both the STAT 704/705 sequence and STAT 713.

**RATIONALE:** Course covers more material than two comparable two-credit courses combined. Justified by the amount of material covered.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** **STAT 717. Categorical Data Analysis.** (3) II. ~~Analysis of categorical data arranged in two- and higher-dimensional contingency tables using classical methods and log-linear models. Various measures of association are discussed.~~ Pr.: STAT 704, 705.

**TO:** **STAT 717. Categorical Data Analysis.** (3) II. Analysis of categorical count and proportion data. Topics include tests of association in two-way tables; measures of association; Cochran-Mantel-Haenzel tests for 3-way tables; generalized linear models; logistic regression; loglinear models. Pr.: STAT 704, 705.

**RATIONALE:** More accurately reflects what is currently taught in the course.

**EFFECTIVE DATE:** Fall 2003

## CURRICULUM CHANGES

### Department of Art and Sciences

#### CHANGE:

(page 91, undergraduate catalog)

#### Degree Requirements

At least ~~120~~ credit hours are required for graduation.

Courses numbered below 100 may not be applied toward a degree. In addition to the university's limit on credits for extracurricular work, no more than 4 credit hours in lifetime sports and exercise activity classes may be applied toward a degree.

#### Common degree requirements

(Three courses, 8 credit hours minimum)

Purpose: to give students practice in oral presentation and in writing and analyzing expository and argumentative prose.

ENGL 100	Expository Writing I	3
ENGL 200	Expository Writing II	3
SPCH 105	Public Speaking IA	2
	<b>or</b>	
SPCH 106	Public Speaking I	3

#### TO:

#### Degree Requirements

At least 124 credit hours are required for graduation.

(Students who entered KSU before the fall of 2003 require only 120 hours for graduation).

Courses numbered below 100 may not be applied toward a degree. In addition to the university's limit on credits for extracurricular work, no more than 4 credit hours in lifetime sports and exercise activity classes may be applied toward a degree.

#### Common degree requirements

(Three courses, 8 credit hours minimum)

Purpose: to give students practice in oral presentation and in writing and analyzing expository and argumentative prose.

ENGL 100	Expository Writing I	3
ENGL 200	Expository Writing II	3
SPCH 105	Public Speaking IA	2
	<b>or</b>	
SPCH 106	Public Speaking I	3

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:**

(page 92, undergraduate catalog)

**TO:****Bachelor of Arts and Bachelor of Sciences****College of Arts and Sciences  
basic requirements**

The aim of these requirements is to provide breadth in the major areas of knowledge outside of the field of specialization. Introductory and intermediate-level courses are available for this purpose in departments in natural sciences, social sciences, and humanities. Basic requirements are to be fulfilled with courses chosen by students in consultation with their advisors.

The aim of the requirement in the arts and humanities is to encourage and to enable students to recover "a heritage so important that to lose it would be to lose the very qualities that make men and women greater than the systems they devise and mark the difference between a society of robots and a community of civilized human beings." The aim of the requirement in the sciences is to ensure that students gain an immediate acquaintance with the general principles of scientific method and with the different shapes the scientific enterprise takes in the physical sciences, the life sciences and the social sciences.

Up to two courses from one department may be used to fulfill the distribution requirements for humanities and the social sciences. They may be used at the same time to count towards the student's major. No course may be used to satisfy more than one specific requirement for humanities and social sciences. Only courses taken for 2 or more credit hours satisfy these requirements; courses in excess of 5 credit hours count as two courses.

**Bachelor of Arts and Bachelor of Sciences****College of Arts and Sciences  
basic requirements**

The aim of these requirements is to provide breadth in the major areas of knowledge outside of the field of specialization. Introductory and intermediate-level courses are available for this purpose in departments in natural sciences, social sciences, and humanities. Basic requirements are to be fulfilled with courses chosen by students in consultation with their advisors.

The aim of the requirement in the arts and humanities is to encourage and to enable students to recover "a heritage so important that to lose it would be to lose the very qualities that make men and women greater than the systems they devise and mark the difference between a society of robots and a community of civilized human beings." The aim of the requirement in the sciences is to ensure that students gain an immediate acquaintance with the general principles of scientific method and with the different shapes the scientific enterprise takes in the physical sciences, the life sciences and the social sciences.

Up to two courses from one department may be used to fulfill the distribution requirements for humanities and the social sciences. They may be used at the same time to count towards the student's major. No course may be used to satisfy more than one specific requirement for humanities and social sciences. Only courses taken for 2 or more credit hours satisfy these requirements; courses in excess of 5 credit hours count as two courses.

At least 124 credit hours are required for graduation. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation).

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:**

(page 93, undergraduate catalog)

**TO:****Bachelor of Fine Arts**

~~120 hours required for graduation~~

The bachelor of fine arts degree is a professionally oriented undergraduate degree in art. ~~Emphasis is on actual practice in creative art disciplines.~~ The degree is considered appropriate preparation for the master of fine arts degree, which is recognized as the terminal degree in studio arts, and for the ~~master of arts~~ in art therapy, which is required for certification as an art therapist. ~~The B.F.A. in art is a four-year, 120-credit-hour program with emphases possible in painting, sculpture, illustration, digital arts, ceramics, graphic design, printmaking, metalsmithing and jewelry, drawing, and pre-art therapy.~~ The degree requirements are as follows:

**Basic requirements (45 hours)**

Communications—English composition, two courses; and oral communication, one course  
 Social sciences—two courses  
 Humanities—three courses  
 Philosophy or mathematics—one course  
 Natural sciences—two courses, one with a lab  
 General electives—11-19 hours

**Art courses (75 credit hours)**

Core—39 hours  
 Major—21 hours  
 Art electives and related courses—15 hours

**Bachelor of Fine Arts**

At least 124 credit hours are required for graduation. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation).

The bachelor of fine arts degree is a professionally oriented undergraduate degree in art. It is designed primarily for those planning to become professional artists, artist-teachers, or art therapists. Greater emphasis is placed on actual practice in the creative arts disciplines.

The degree is considered the appropriate preparation for the master of fine arts degree, which is recognized as the terminal degree in studio arts, and for the master's degree in art therapy, which is required for registration as an art therapist. The B.F.A. in art is a four-year, 124-hour program with concentrations possible in painting, sculpture, ceramics, graphic design, printmaking, drawing, metalsmithing and jewelry, illustration, digital arts, pre-art therapy, and photography. The degree requirements are as follows:

**Basic requirements (45 hours)**

Communications—English composition, two courses; and oral communication, one course  
 Social sciences—two courses  
 Humanities—three courses  
 Philosophy or mathematics—one course  
 Natural sciences—two courses, one with a lab  
 General electives—11-19 hours

**Art courses (75 credit hours)**

Core—39 hours  
 Major—21 hours  
 Art electives and related courses—15 hours

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:**

*(page 95, undergraduate catalog)*

**TO:****Secondary teacher certification**

An arts and sciences major may apply some elective hours toward the requirements for secondary teacher certification. In most arts and sciences departments, students can complete an academic major and earn certification within the ~~420~~ hours of course work required for a degree. Because the teacher training courses are offered through the College of Education, students who choose to combine these two programs are entitled to two advisors, one in the major field of study, the other in secondary education.

By combining a traditional academic major with teaching certification, students can be assured of varied choices after graduation. By pursuing an arts and sciences major, students also have the option of working toward a bachelor of arts degree and studying a foreign language. In addition, the teaching certification will qualify graduates to teach in a public secondary school. For specific certification requirements in secondary education, see the College of Education section of this catalog.

**Secondary teacher certification**

An arts and sciences major may apply some elective hours toward the requirements for secondary teacher certification. In most arts and sciences departments, students can complete an academic major and earn certification within the 124 hours of course work required for a degree. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation). Because the teacher training courses are offered through the College of Education, students who choose to combine these two programs are entitled to two advisors, one in the major field of study, the other in secondary education.

By combining a traditional academic major with teaching certification, students can be assured of varied choices after graduation. By pursuing an arts and sciences major, students also have the option of working toward a bachelor of arts degree and studying a foreign language. In addition, the teaching certification will qualify graduates to teach in a public secondary school. For specific certification requirements in secondary education, see the College of Education section of this catalog.

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**Department of Chemistry****CHANGE:**

*(page 107, undergraduate catalog)*

**General requirements for undergraduate major**

Students majoring in chemistry or chemical science must earn grades of C or better in all courses prescribed for these curricula, as outlined below. A total of ~~120~~ credit hours are required for graduation. The B.A. program is obtained by following the curriculum for the B.S. degrees with the additional foreign language requirement of the College of Arts and Science.

**TO:****General requirements for undergraduate major**

Students majoring in chemistry or chemical science must earn grades of C or better in all courses prescribed for these curricula, as outlined below. A total of 124 credit hours are required for graduation. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation). The B.A. program is obtained by following the curriculum for the B.S. degrees with the additional foreign language requirement of the College of Arts and Sciences.

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**Department of Geography**

**CHANGE:**

(page 113, undergraduate catalog)

**Geography (B.A. or B.S.)**

Students of geography may pursue a traditional major in geography, a geography minor, or choose the geography pre-planning option. The bachelor of science or the bachelor of arts degree may be earned.

Requirements for a major in geography:

GEOG 100	World Regional Geography	3
	<del>or</del>	
GEOG 200	Human Geography	3
GEOG 220	Environmental Geography I	4
GEOG 221	Environmental Geography II	4
GEOG 440	Geography of Natural Resources	3
GEOG 450	Geography of Economic Behavior	3
GEOG 555	Cartography/MicroCAD	3
STAT 330	Elementary Statistics for the Social Sciences (or its equivalent)	3
<del>A 500- or 600-level regional geography course.</del>		
<del>One course at 700 level (except GEOG 700, 702, 705, 708, 709, or 711)</del>		
<del>Additional courses at the 400 level or above to total 30 hours in geography.</del>		

Although the major requirements for the B.A. or B.S. degrees are the same, college requirements differ as described earlier in the College of Arts and Sciences section.

Students may pursue a general program in geography, or may choose to develop a concentration in either environmental studies or community studies. Other concentrations may be developed to reflect the particular interests of a student. For example, a student may earn a teaching certificate while working toward a degree in geography.

Another curriculum leads to the bachelor of science degree in secondary education. For information concerning this program see the College of Education section of this catalog.

**RATIONALE:** The changes to the geography undergraduate major reflect changes in the discipline over the last several years, and bring the requirements more in line with the expertise and interests of the geography department faculty.

**EFFECTIVE DATE:** Fall 2003

**TO:**

**Geography (B.A. or B.S.)**

Students of geography may pursue a traditional major in geography, a geography minor, or choose the geography pre-planning option. The bachelor of science or bachelor of arts degree may be earned.

Requirements for a major in geography:

GEOG 100	World Regional Geography	3
GEOG 200	Human Geography	3
GEOG 220	Environmental Geography I	4
GEOG 221	Environmental Geography II	4
<u>GEOG 302</u>	<u>Cartography and Thematic Mapping</u>	<u>3</u>
<u>GEOG 495</u>	<u>Capstone Seminar in Geography</u>	<u>2</u>
<u>GEOG 508</u>	<u>GIS I</u>	<u>3</u>

One course in human-environment interaction: (GEOG 440, 718, 720, 725, 760, 765, or 770) 3

Geography Electives (three hours must be at the 700 level; GEOL 520 may be used as a geography elective) 12

Total credit hours required 37

Although the major requirements for the B.A. or B.S. degrees are the same, college requirements differ as described earlier in the College of Arts and Sciences section.

Students may pursue a general program in geography, or may choose to develop a concentration in either environmental studies or community studies. Other concentrations may be developed to reflect the particular interests of a student. For example, a student may earn a teaching certificate while working toward a degree in geography.

Another curriculum leads to the bachelor of science degree in secondary education. For information concerning this program see the College of Education section of this catalog.

**Department of Mathematics**

**CHANGE:**

(page 125, undergraduate catalog)

**TO:**

**Requirements**

Students may obtain either a bachelor of arts or a bachelor of science degree with a major in mathematics. For either degree, in addition to the general requirements of the university and college, mathematics majors must complete the following core courses:

MATH 220	Analytic Geometry and Calculus I	4
MATH 221	Analytic Geometry and Calculus II	4
MATH 222	Analytic Geometry and Calculus III	4
MATH 240	Elementary Differential Equations	4
<del>CIS 200</del>	<del>Fundamentals of Computer Programming</del>	<del>4</del>
STAT 510	Introductory Probability and Statistics I	3
MATH 512	Introduction to Modern Algebra	3
	<b>or</b>	
MATH 511	Introduction to Algebraic Systems	3
MATH 633	Advanced Calculus I	3
	<b>or</b>	
MATH 520	Foundations of Analysis	3

For the B.A. degree, students must take 15 additional hours in mathematics numbered 400 or above; PHILO 510 may be substituted for 3 of these hours.

For the B.S. degree, students must take 15 additional hours in mathematics numbered 400 and above;

Students majoring in mathematics must earn a grade of C or better in each math course used to satisfy requirements for the major.

All students should enroll in MATH 199 in their first fall on campus.

Students may choose one of the following four programs, depending on their career interests.

**Requirements**

Students may obtain either a bachelor of arts or a bachelor of science degree with a major in mathematics. For either degree, in addition to the general requirements of the university and college, mathematics majors must complete the following core courses:

MATH 220	Analytic Geometry and Calculus I	4
MATH 221	Analytic Geometry and Calculus II	4
MATH 222	Analytic Geometry and Calculus III	4
MATH 240	Elementary Differential Equations	4
<del>CIS 111</del>	<del>Fundamentals of Computer Programming</del>	<del>3</del>
	<b>or</b>	
<del>CIS 200</del>	<del>Fundamentals of Software Design and Implementation</del>	<del>4</del>
	<b>or both of the following</b>	
<del>CIS 105</del>	<del>Introduction to Computer Programming</del>	<del>1</del>
	<b>and</b>	
<del>CIS 209</del>	<del>C Programming for Engineers</del>	<del>3</del>
STAT 510	Introductory Probability and Statistics I	3
MATH 512	Introduction to Modern Algebra	3
	<b>or</b>	
MATH 511	Introduction to Algebraic Systems	3
MATH 633	Advanced Calculus I	3
	<b>or</b>	
MATH 520	Foundations of Analysis	3

For the B.A. degree, students must take 15 additional hours in mathematics numbered 400 or above; PHILO 510 may be substituted for 3 of these hours.

For the B.S. degree, students must take 15 additional hours in mathematics numbered 400 and above;

Students majoring in mathematics must earn a grade of C or better in each math course used to satisfy requirements for the major.

All students should enroll in MATH 199 in their first fall on campus.

Students may choose one of the following four programs, depending on their career interests.

**RATIONALE:** CIS has revised/introduced the courses CIS 105, CIS 111, CIS 200 and CIS 209. The change here better reflects what our math majors need.

**EFFECTIVE DATE:** Fall 2003

**Department of Music****CHANGE:***(page 133, undergraduate catalog)***Bachelor of arts**

429 hours required for graduation

The bachelor of arts with a major in music emphasizes the liberal arts tradition. The program provides enough flexibility in electives for students to meet other preprofessional requirements, and it thus may appeal to students whose professional goals do not terminate with music. The minimum requirement in music is 48 hours, including the following:

MUSIC 225	Freshman Survey	2
MUSIC 230	Music Theory II	3
MUSIC 320	Music Theory III	3
MUSIC 360	Music Theory IV	4
MUSIC 231	Aural Skills I	1
MUSIC 321	Aural Skills II	1
MUSIC 361	Aural Skills III	1
MUSIC 322	Aural Skills Proficiency	0
MUSIC 530	Music History I	3
MUSIC 531	Music History II	3
MUSIC 532	Music History III	3
MUSIC 525	Instrumentation and Arranging	2

Recital attendance is required for seven semesters (transfer students' records will be evaluated). The major program of music leading to the degree bachelor of arts may be elected with an emphasis in the areas of music literature, composition, or performance.

The music literature area requires 8 hours of electives in music history and music literature. In addition, 8 semester hours in a single performance area are required, of which half must be from the 400 level.

The composition area calls for MUSIC 521 (three hours), 615, 616, 714, 3 semester hours in music literature, and 8 semester hours of piano, of which half must be from the 400 level.

The performance area calls for MUSIC 615 and 616 plus 16 hours of an instrument or voice, of which half must be from the 400 level.

Participation in a music organization (instrumental or choral, depending on the major performance area) is required each semester, and the piano proficiency requirement must be passed before graduation.

**TO:****Bachelor of arts**124 hours required for graduation. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation).

The bachelor of arts with a major in music emphasizes the liberal arts tradition. The program provides enough flexibility in electives for students to meet other preprofessional requirements, and it thus may appeal to students whose professional goals do not terminate with music. The minimum requirement in music is 48 hours, including the following:

MUSIC 225	Freshman Survey	2
MUSIC 230	Music Theory II	3
MUSIC 320	Music Theory III	3
MUSIC 360	Music Theory IV	4
MUSIC 231	Aural Skills I	1
MUSIC 321	Aural Skills II	1
MUSIC 361	Aural Skills III	1
MUSIC 322	Aural Skills Proficiency	0
MUSIC 530	Music History I	3
MUSIC 531	Music History II	3
MUSIC 532	Music History III	3
MUSIC 525	Instrumentation and Arranging	2

Recital attendance is required for seven semesters (transfer students' records will be evaluated). The major program of music leading to the degree bachelor of arts may be elected with an emphasis in the areas of music literature, composition, or performance.

The music literature area requires 8 hours of electives in music history and music literature. In addition, 8 semester hours in a single performance area are required, of which half must be from the 400 level.

The composition area calls for MUSIC 521 (three hours), 615, 616, 714, 3 semester hours in music literature, and 8 semester hours of piano, of which half must be from the 400 level.

The performance area calls for MUSIC 615 and 616 plus 16 hours of an instrument or voice, of which half must be from the 400 level.

Participation in a music organization (instrumental or choral, depending on the major performance area) is required each semester, and the piano proficiency requirement must be passed before graduation.

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.**EFFECTIVE DATE:** Fall 2003

**Department of Political Science****CHANGE:**

*(page 142, undergraduate catalog)*

**TO:****Specialized curricula**

The department participates in a number of interdisciplinary curricula and activities and encourages students to take advantage of these. In most instances, the requirements for these programs or secondary majors also fulfill college or political science department requirements, making it possible to finish both the major and a secondary major within the required ~~120~~ hours for graduation. More extensive information on these programs and secondary majors is available from the faculty listed here as contact people, from other members of the political science department, or elsewhere in this catalog.

**Specialized curricula**

The department participates in a number of interdisciplinary curricula and activities and encourages students to take advantage of these. In most instances, the requirements for these programs or secondary majors also fulfill college or political science department requirements, making it possible to finish both the major and a secondary major within the required 124 hours for graduation. (Students who entered KSU before the fall of 2003 require only 120 hours for graduation). More extensive information on these programs and secondary majors is available from the faculty listed here as contact people, from other members of the political science department, or elsewhere in this catalog.

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**Department of Sociology, Anthropology, and Social Work****CHANGE:**

(page 147-148, undergraduate catalog)

**Social work**

Social work is concerned with the interaction between people and their social environments. Social workers help people deal with other people, cope with the many social and environmental forces that affect and control daily life, and help solve problems that inhibit growth and development.

The undergraduate social work program is accredited by the Commission on Accreditation of the Council on Social Work Education to educate entry-level, generalist social work practitioners. The social work major is of particular value to students who intend to pursue a career in social work upon graduation.

The bachelor's degree in social work is recognized as a beginning-level professional degree. Students graduating from the social work program are eligible for licensure as bachelor degree social workers in Kansas and numerous other states. No other bachelor's degree is recognized, or necessary, for such eligibility. Students who wish to pursue graduate studies in social work will be eligible for advanced standing in many master of social work programs throughout the United States.

The intervention tasks performed by social workers are derived from a common base of knowledge, values, and skills. Thus, social workers are uniquely qualified to provide resources, services, and opportunities to individuals, groups, families, organizations, and communities. Students are required to complete a field practice placement during their senior year to integrate classroom material with practice experience in a professional setting.

Students wishing to declare a major in social work may enroll directly in curriculum SOCWK. This is a provisional admission to the social work program. Students must complete SOCWK 010, SOCWK 260, SOCWK 510, and SOCWK 515 before formal evaluation and admission to the program can occur.

Formal evaluation occurs prior to admission to SOCWK 560 Social Work Practice I, taken during the junior year. At that time each student completes a personal statement and undergoes a formal review of academic and classroom performance by the program admissions committee. Students must have a 2.3 overall GPA and a 2.75 GPA in the core courses. Students successfully passing this review may enter the first course in the practice sequence, SOCWK 560.

Failure to meet and maintain the standards of the program will result in dismissal from the social work major. A student may be allowed to remain in the major on conditional or probationary status, but he or she must meet the standards of the program to complete the major.

For complete details on the admissions requirements and procedure, see the program admissions policy in the student handbook. Appeals of program faculty decisions may be made through established departmental procedures.

A student earning a B.A. or B.S. in social work must complete 420 hours including SOCWK 010 Orientation to the Social Work Major; SOCWK 260 Introduction to Social Work; 40 additional hours of major courses; and 28 hours of tool and related courses.

**TO:****Social work**

Social work is concerned with the interaction between people and their social environments. Social workers help people deal with other people, cope with the many social and environmental forces that affect and control daily life, and help solve problems that inhibit growth and development.

The undergraduate social work program is accredited by the Commission on Accreditation of the Council on Social Work Education to educate entry-level, generalist social work practitioners. The social work major is of particular value to students who intend to pursue a career in social work upon graduation.

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For complete details on the admissions requirements and procedure, see the program admissions policy in the student handbook. Appeals of program faculty decisions may be made through established departmental procedures.

A student earning a B.A. or B.S. in social work must complete 124 hours (students who entered KSU before the fall of 2003 require only 120 hours for graduation) including SOCWK 010 Orientation to the Social Work Major; SOCWK 260 Introduction to Social Work; 40 additional hours of major courses; and 28 hours of tool and related courses.

**RATIONALE:** To make our catalog compliant with University/Board of Regents policy.

**EFFECTIVE DATE:** Fall 2003

**Department of Statistics**

**CHANGE:**  
(page 156, undergraduate catalog)

**TO:**

Students who major in statistics may seek a bachelor of arts degree or a bachelor of science degree by satisfying the general requirements of that degree, and completing the following:

MATH 220	Analytic Geometry and Calculus I	4
MATH 221	Analytic Geometry and Calculus II	4
MATH 222	Analytic Geometry and Calculus III	4
<del>MATH 551</del>	<del>Applied Matrix Theory</del>	<del>3</del>
CIS 200	Fundamental of Software Design and Implementation	4
<del>STAT 410</del>	<del>Probabilistic Systems Modeling</del>	<del>3</del>
STAT 510	Introductory Probability and Statistics I	3
STAT 511	Introductory Probability and Statistics II	3
STAT 704	Analysis of Variance and Covariance	2
STAT 705	Regression and Correlation Analyses	2
<del>STAT 720</del>	<del>Design of Experiments</del>	<del>3</del>
<del>IE 541</del>	<del>Statistical Quality Control</del>	<del>3</del>
<del>Statistics elective (STAT 710, 716, 717, or 722)</del>		<del>3</del>
ENGL 516	Written Communication for the Sciences	3
<del>Upper division quantitative electives</del>		<del>9</del>
<del>(May include mathematics, computer science, or other approved courses)</del>		

A minimum of 2.0 GPA in STAT courses taken as part of the major is required for graduation.

Students who major in statistics may seek a bachelor of arts degree or a bachelor of science degree by satisfying the general requirements of that degree, and completing the following:

MATH 220	Analytic Geometry and Calculus I	4
MATH 221	Analytic Geometry and Calculus II	4
MATH 222	Analytic Geometry and Calculus III	4
CIS 200	Fundamental of Computer Programming (or approved substitute)	3-4
<u>One course selected from MATH 551, CIS209, CIS 300</u>		<u>3</u>
ENGL 516	Written Communication for the Sciences	3
<u>One of STAT 320, STAT 330, STAT 340, STAT 350</u>		<u>3</u>
<u>One of STAT 341, STAT 351</u>		<u>3</u>
<u>(Note: STAT courses at the 400 level or higher may replace either or both of the 300 level STAT courses.)</u>		
STAT 510	Introductory Probability and Statistics I	3
STAT 511	Introductory Probability and Statistics II	3
STAT 704	Analysis of Variance and Covariance	2
STAT 705	Regression and Correlation Analyses	2
<u>One of STAT 710, STAT 720, STAT 722</u>		<u>2-3</u>
<u>One STAT course at 700 level in addition to above</u>		<u>2-3</u>

Upper division quantitative electives to give a total of 46 credit hours. Courses must be at the 400 level or above, and may include IMSE 541, math, computer science, statistics, or course in other area with substantial quantitative content.

A minimum of 2.0 GPA in STAT courses taken as part of the major is required for graduation.

**RATIONALE:** These changes are responses to several changes in the university. The CIS 200 course has changed dramatically from the time it became a required course; it is no longer primarily a programming course. The including of the 300 level statistic courses is to give our majors credit for courses that they take early on in their career. Changing STAT 410 and IMSE 541 (formerly IE 541) from requirements to electives gives greater flexibility to the curriculum.

**EFFECTIVE DATE:** Fall 2003

**GENERAL EDUCATION**

*The College of Arts and Sciences Course and Curriculum committee is forwarding the following courses to the University General Education Implementation Task Force Committee based on the academic merits, with the expectation that the Task Force will scrutinize the course for General Education criteria:*

**Department of Speech Communication, Theatre, and Dance**

**CHANGE:** ~~THTRE 664. **Creative Dramatics.** (3) The development of creative imagination and personal well-being through theatre games, improvisation, role playing, and simulation. The use of drama in recreational and educational settings. Improvisation in performing scripted drama. Pr.: Junior standing.~~

**TO:** THTRE 664. **Creative Drama.** (3) The development of creative imagination and personal well-being through theatre games, improvisation, storytelling, and puppetry for use in educational and recreational settings. Pr.: Junior standing.

**RATIONALE:** This proposal is in the Deans' office for anyone who might care to examine it.

**EFFECTIVE DATE:** Fall 2003

**CHANGE:** ~~THTRE 665. **Drama Therapy with Special Populations.** (3) The therapeutic uses of drama in the development of creative imagination, self expression, and social relatedness with special populations such as the mentally disabled, the emotionally disturbed, and the senior adult. Pr.: Junior standing.~~

**TO:** THTRE 665. **Drama Therapy with Special Populations.** (3) The therapeutic uses of drama in the development of creative imagination, self expression, and social relatedness with special populations such as clients who have developmental disabilities, physical disabilities, health issues, or are aging. Pr.: Junior standing.

**RATIONALE:** This proposal is in the Deans' office for anyone who might care to examine it.

**EFFECTIVE DATE:** Fall 2003