

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

approved at the College Course and Curriculum Meeting

October 10, 2013  
Eisenhower 015

4:00 p.m.

Undergraduate/Graduate  
Expedited and Non-Expedited

Contact Person: Yasmin Patell  
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**Units outside the College of Arts and Sciences affected:**

Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural Engineering, Chemical Engineering, Electrical and Computer Engineering, Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture Forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel Textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Anthropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology. Human Ecology

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

# NON-EXPEDITED COURSE PROPOSALS

## Courses Numbered 000-599

### Art

FROM:

ART 230 – Sculpture I  
ART 265 – Ceramics I  
ART 270 – Metalsmithing I

TO:

ART 340 – Sculpture I  
ART 365 – Ceramics I  
ART 370 – Metalsmithing I

**RATIONALE:** All these courses have a 200-level pre-requisite, and they are pre-requisites for 500- or 600- level classes, so we would like to change them to 300-level classes. On this sheet we are only asking to change the numbers for these three classes. All other information regarding each course remains the same.

**IMPACT:** None (We contacted the Department of Apparel, Textiles, and Interior Design and the College of Education and they are both fine with these changes as it does not affect content). They will simply have to change the numbers of the art courses they use in their curriculum.

**EFFECTIVE DATE:** Spring 2014

FROM:

ART 220 – Water Media I  
ART 235 – Printmaking I  
ART 245 – Introduction to Oil Painting  
ART 295 – Photography in Art I

TO:

ART 320 – Water Media I  
ART 335 – Printmaking I  
ART 345 – Introduction to Oil Painting  
ART 395 – Photography in Art I

**RATIONALE:** All these courses have two pre-requisites, and they are pre-requisites for 500- or 600-level classes, so it is more logical that they change to 300-level classes. On this sheet, we are only asking to change the numbers for these four classes. All other information regarding each course remains the same.

**IMPACT:** None. (We contacted the department of Apparel, Textiles, and Interior Design and the College of Education and they are both fine with these changes as it does not affect content). They will simply have to change the numbers of the Art courses they use in their curriculum.

EFFECTIVE DATE: Spring 2014

FROM: TO:

Course Number	Current Pre-Reqs	Change to
ART 350 – Drawing III	ART 225	ART 325
ART 530 – Color Printmaking Workshop	ART 235	ART 335
ART 561 – Oil Painting II	ART 220 and ART 245	ART 320 and ART 345
ART 563 – Photography in ART II	ART 295	ART 395
ART 565 – Ceramics II	ART 265	ART 365
ART 567 – Advanced Techniques: Digital Photography	ART 295	ART 395
ART 570 – Mixed Media Painting Workshop	ART 245	ART 345
ART 600 – Advanced Drawing	ART 225	ART 325
ART 610 – Figure Drawing II	ART 225	ART 325
ART 635 – Advanced Printmaking	ART 235	ART 335
ART 645 – Sculpture II	ART 230	ART 340
ART 655 – Metalsmithing Techniques	ART 270	ART 370

RATIONALE: We are changing the numbers of the pre-requisites for these courses so these are the courses that will need to be updated with the new pre-requisite numbers but this is not to request any change. It is simply a record of what will need to be updated if the change requests on other forms go through.

IMPACT: None

EFFECTIVE DATE: Spring 2014

## Economics

ADD: ECON 599 – Topics in Economics. (1-3) On Sufficient Demand. Courses on special topics to be taught on demand. Pr.: To be set for each topic.

RATIONALE: This course has been in the Undergraduate catalog but has not been offered for a number of years. The course was accidentally inactivated in the iSIS catalog on June 1, 1997. We would like to reactivate the course.

IMPACT: None

EFFECTIVE DATE: Spring 2014

## Modern Languages

ADD: MLANG 100 – Beginner Studies in Foreign Language. (1-5) I, II, S.  
Course used to transfer credit for first and second semester language courses not offered at K-State. Consultation for approval is expected. Course may be repeated for a maximum of 10 credit hours. K-State 8: Aesthetic Interpretation; Global Issues and Perspectives.

RATIONALE: Course used to transfer credit for first and second semester language courses not offered at K-State.

IMPACT: None

EFFECTIVE DATE: Spring 2014

ADD: MLANG 200 – Intermediate Studies in Foreign Language I. (1-5) I, II, S.  
Course used to transfer credit for third semester language courses not offered at K-State. Prior consultation for approval is expected. K-State 8: Aesthetic Interpretation; Global Issues and Perspectives.

RATIONALE: Course used to transfer credit for third semester language courses not offered at K-State.

IMPACT: None

EFFECTIVE DATE: Spring 2014

ADD: MLANG 300 – Intermediate Studies in Foreign Language II. (1-4) I, II, S.  
Course used to transfer credit for fourth semester language course not offered at K-State. Prior consultation for approval is expected. K-State 8: Aesthetic Interpretation; Global Issues and Perspectives.

RATIONALE: Course used to transfer credit for fourth semester language course not offered at K-State.

IMPACT: None

EFFECTIVE DATE: Spring 2014

## Music, Theatre, and Dance

FROM: ~~THTRE 267 – Fundamentals of Stage Costuming and Makeup. (3) I, II. Basic techniques of stage costume construction and stage make-up. Examination of the costume design process. K-State 8: Aesthetic Interpretation.~~

TO: THTRE 367 – Fundamentals of Costume. (3) I, II. Basic techniques of stage costume construction. Examination of the costume design process. K-State 8: Aesthetic Interpretation.

RATIONALE: The course is being focused only on costume as there is not enough time to cover both costuming and makeup in a detailed enough way in one semester. It is being raised to a 300-level to make it equivalent to the other Fundamentals courses THTRE 369 Introduction to Theatrical Design and THTRE 368 Fundamentals of Technical Production.

IMPACT: None

EFFECTIVE DATE: Fall 2014

ADD: MUSIC 311 – Women in Music. (3) I. Explores music composed by women. Features western art music from the traditional stylistic periods, women's contributions to jazz, popular, and some world music. Examines women's roles as performers and patrons, and attitudes toward female musicians.

K-State 8: Aesthetic Interpretation; Historical Perspectives.

K-State 8 RATIONALE: This course deals with music composed throughout history by women in all genres. Students must learn to discern music stylistically through listening and through knowledge of the era. A journey through music as represented by women performers and composers is a unique perspective on music history.

RATIONALE: This course has been offered under the music program's "topics" number three times in the last two years. It will continue to be offered each Fall semester via distance education for the foreseeable future. It therefore deserves a unique course number, one that will better reflect the demands of the material. A 300-level number is more representative of the work and critical skills required for success in this course. This number would also make the course available as an elective for music majors and minors, in addition to the many women's studies students who currently comprise the majority of enrollees.

IMPACT: The current course, MUSIC 220: Topics in Music: Women in Music is cross listed with Women's Studies. MUSIC 311: Women in Music, will also be cross listed as it will be exactly the same course.

EFFECTIVE DATE: Fall 2014

ADD: THTRE 364 – Scene Painting. (3) I. Practical application of painting techniques for the stage. K-State 8: Aesthetic Interpretation.

RATIONALE: This course has previously been offered quite frequently under the THTRE 711 Topics in Technical Theatre course. It is time to have a course dedicated to Scene Painting and the faculty feel that it is not appropriate as an upper division course. But as a lower division course.

K-State 8 RATIONALE: Scene Painting teaches many artistic techniques of painting such as perspective, trompe d'oeil, and other visual illusions (e.g., creating textures like brick or wood that are viewed as natural from a distance).

IMPACT: None

EFFECTIVE DATE: Fall 2014

## **Sociology, Anthropology and Social Work**

FROM: ANTH 280 - Introduction to ~~Physical~~ Anthropology. (3)-I, II. ~~History of research; principles of evolution and human genetics; primate relations of hominids; fossil evidence of the evolution of hominids; the study of modern race; culture and evolution.~~ K-State 8: Historical Perspectives; Natural and Physical Science.

TO: ANTH 280 – Introduction to Biological Anthropology. (4) I, II (even years only). Provides knowledge regarding the scope of Biological Anthropology, and develop an understanding of: 1) evolutionary theory and evolutionary processes, 2) patterns of adaptation to the environment in primates, and 3) human evolution, human adaptation and human variation. Key concepts/perspectives will include: evolution, selection, adaptation genetics, population genetics, as well as variation and variability. Note: Requires 3 hours lecture and 2 hours lab per week. K-State 8: Historical Perspectives; Natural and Physical Science.

RATIONALE: ANTH 280 and 281 are currently taught as two courses. The first is a lecture class, and the second is a laboratory section. Students registered in ANTH 280 are currently not required to enroll in ANTH 281. They are currently

allowed to take 280 and enroll in ANTH 281 during a different (later) semester. The rationale behind this was that ANTH 281 did not follow the content of ANTH 280. I have modified both ANTH 280 and ANTH 281 so that the content in the laboratory reinforces and expands on the material reviewed in the lecture. Thus, students would benefit the most from taking both together. Since students, at times, get confused during registration, it would be best to combine both classes into one. Since the class would combine both lecture and laboratory time. I propose that the combination of the two would make this a four credits class.

I would also like to change the class name from Introduction to Physical Anthropology to Introduction to Biological Anthropology. Although Physical Anthropology is the traditional name of this subdiscipline, the name is a better descriptor of a discipline restricted to osteological and anatomical description of human variations and origins. AS the discipline now encompasses issues regarding human variation that go beyond anatomy and osteology and include areas such as genetics, primateology, forensics, etc., the most common name is Biological Anthropology; thus, this is the name that should be used in the title.

IMPACT: None

EFFECTIVE DATE: Spring 2014

DROP: ANTH 281 – Introduction to Physical Anthropology Laboratory. (1) I, II (odd years only). Laboratory investigation of human skeletal anatomy, human genetics, primate comparative anatomy, fossil hominid morphology, and comparative evolution of hominid types. Pr.: ANTH 280 or concurrent enrollment.

RATIONALE: ANTH 280 and 281 are currently taught as two courses. The first is a lecture class, and the second is a laboratory section. Students registered in ANTH 280 are currently not required to enroll in ANTH 281. They are currently allowed to take 280 and enroll in ANTH 281 during a different (later) semester. The rationale behind this was that ANTH 281 did not follow the content of ANTH 280. I have modified both ANTH 280 and ANTH 281 so that the content in the laboratory reinforces and expands on the material reviewed in the lecture. Thus, the students would benefit the most from taking both together. Since students get at times confused during registration, it would be best to combine both classes into one. Since the class would combine both lecture and laboratory time, I propose that the combination of the two would make this a four credit class.

IMPACT: None

EFFECTIVE DATE: Spring 2014

# NON-EXPEDITED COURSE PROPOSALS

## Courses Numbered 600-999

### **Geology**

**ADD:** GEOL 650 – Geomicrobiology. (3) II. Study of microorganisms in geological environments. Topics include: geochemical controls on microbial activity and impacts of microbial activity on geological environments. K-State 8: Natural and Physical Sciences; Empirical and Quantitative Reasoning. Pr.: CHM 210, CHM 230.

**K-State 8 RATIONALE:** The course will incorporate concepts from geology, chemistry and biology. As such, it will provide an excellent opportunity for students to explore relationships between these traditionally-defined disciplines, an overall goal of the K-State 8 program. Also, consistent with the program, furthermore, the course will employ quantitative analysis of geochemistry data to understand controls on microbial populations in geological environments and will examine topics of great societal interest such as water quality and energy production.

**RATIONALE:** We seek to add the course “Geomicrobiology” to our curriculum because the course will provide students with valuable training for future careers in geoscience that is currently unavailable on campus. In catalyzing most of the oxidation-reduction reactions that occur in near-surface geological environments (upper 3-5 km of Earth’s crust), microorganisms have a large impact on the physical and chemical properties of those environments. Geomicrobiology is a field of science that has emerged over the past few decades that examines these impacts as well as the role of geological environments in shaping microbial activity. The knowledge and skills gained from the course are in demand and will allow students to contribute to efforts in environmental and energy sectors, including work to improve water quality, store energy and energy by-products in the subsurface, understand soil-climate change feedbacks, improve the sustainability of natural gas production, and develop strategies to enhance oil recovery.

**IMPACT:** We do not believe that this course impacts any of the units. We discussed that possibility with two faculty members in the Division of Biology, Drs. Dodds and Blair, who do research in similar to this topic. Neither faculty member objected to our course proposal.

**EFFECTIVE DATE:** Spring 2014

## Modern Languages

FROM: ~~GRAD 703~~—Practicum in Adult ~~TESL~~: Oral Communication. (3) I, II, S. ~~Methods and techniques for teaching oral communication (listening comprehension, speaking, and pronunciation) provide a foundation for planning and teaching activities. Students demonstrate ability to communicate content to students at varying levels of English proficiency, control basic classroom management techniques, and use of a variety of techniques to assess student performance in their practice teaching. Small group discussions and ESL class observations aid students in development of a teaching portfolio. Pr.: Graduate Standing.~~

TO: MLANG 803 – Practicum in Adult TES/FL: Oral Communication. (3) I, II, S. Provides both on an overview of current issues and methodology in TESL/TEFL and provides a foundation for further exploration of techniques used in skill specific areas of oral communication. Pr.: Graduate Standing.

RATIONALE: This course is part of our Modern Languages M.A. program, but the name and number was under “GRAD”. This is to make it more convenient for students to search and enroll in the necessary courses for their M.A. in Modern Languages.

IMPACT: None

EFFECTIVE DATE: Spring 2014

FROM: ~~GRAD 704~~ – Practicum in Adult ~~TESL~~: Written Communication. (3) I, II, S. ~~Methods and techniques for teaching written communication (reading, vocabulary development, grammar, and writing) provide a foundation for planning and teaching activities. Students demonstrate ability to communicate content to students at varying levels of English proficiency, control of basic classroom management techniques, and use of a variety of techniques to assess student performance in their practice teaching. Small group discussions and ESL class observations aid students in the development of a teaching portfolio. Pr.: Graduate standing.~~

TO: MLANG 804 – Practicum in Adult TES/FL: Written Communication. (3) I, II, S. Provides both on an overview of current issues and methodology in TESL/TEFL and provides a foundation for further exploration of techniques used in skill specific areas of written communication. Pr.: Graduate Standing.

RATIONALE: This course is part of our Modern Language M.A. program, but the name and number was under “GRAD”. This it to make it more convenient for

students to search and enroll in the necessary courses for their M.A. in Modern Languages.

IMPACT: None

EFFECTIVE DATE: Spring 2014

ADD: MLANG 805 – Second Language Assessment. (3) I, II, S.  
Explores the basic concepts, principles, and methodology of second language assessment. Pr.: Graduate standing.

RATIONALE: This course is part of our TEFL Master's program, to allow graduate students to discover and discuss a variety of issues both practical and controversial concerning assessment, explore principles and techniques in test development and analysis, discuss influential and seminal readings, and practice test development.

IMPACT: None

EFFECTIVE DATE: Spring 2014

## **Music, Theatre, and Dance**

ADD: MUSIC 676 – Arranging Choral Music. (2) S. Application of basic compositional issues, techniques, and possibilities inherent in scoring and arranging for various choral ensembles.

RATIONALE: We have offered this course as a MUSIC 799 course in the past but since it will be reoccurring, this will facilitate enrollment and graduate school program of study planning.

IMPACT: Graduate School

EFFECTIVE DATE: Summer 2014

## **Sociology, Anthropology, and Social Work**

ADD: ANTH 692 – Human Growth and Development. (3) I. Provides an anthropological examination of the process of growth and development in humans that emphasizes both the biological, evolutionary, and cultural aspects that have shaped them through time. Emphasis is given to the evolution of the life cycle, as well as the social and environmental conditions that affect human

growth. Pr.: ANTH 280 or Instructor's permission. K-State 8: Natural and Physical Sciences.

K-State 8 RATIONALE: This course covers the biological stages of human growth and development, as well as their evolutionary origins and significance.

RATIONALE: This course was offered as a topics course in the fall of 2011. The course examines the process of human growth and development from an anthropological perspective. The course expands our student's anthropological training, and the number of courses offered in Biological Anthropology.

IMPACT: The college of Human Ecology offers some classes that partially overlap with the content of this class, However, these classes are mostly concerned with aging and gerontology (e.g. GERON 630), or with physical, social and emotional needs (GNHE 210), or psychological awareness (FSHS 110). Dr. MacDonald and Dr. Welch (who teaches FSHS 110) have already reviewed the syllabus for this class, and agree that Growing Up Human is a distinct class. The class proposed here, Growing Up Human, addresses human growth and development, from an anthropological perspective, with an emphasis on evolutionary and Life-history theories.

EFFECTIVE DATE: Spring 2014

ADD: ANTH 696 – Bioarchaeology. (3) II. Explores how archaeologists and bioanthropologists approach the study of death, mortuary practices and skeletal remains, to reconstruct past lives and understand the associated behavior. Pr.: ANTH 280 or instructor's consent. K-State 8: Social Science; Natural and Physical Sciences.

K-STATE 8 RATIONALE: This course analyzes how the systemic study of human remains can be used to answer questions regarding human adaptations and cultural change.

RATIONALE: This course has previously been offered as a topics course in Anthropology. This course emphasizes cross-cultural and multidisciplinary approaches, and students are required to examine the study of human remains and mortuary practices from these perspectives. By the end of the course, students will be able to understand how the bioarchaeological study of the body and mortuary practices is an important endeavor that furthers our understanding of past cultures. In addition, students will gain experience in conceiving and conduction research, as they cultivate critical reading and writing abilities.

IMPACT: None

EFFECTIVE DATE: Spring 2014

## Statistics

**DROP:** STAT 704 – Analysis of Variance. (2) I, II, S. Computation and interpretation of two- and three-way analyses of variance; multiple comparisons; applications including use of computers. Note: Meets four times a week during first half of semester. PR.: One previous statistics course.

**RATIONALE:** The content of STAT 704 (2cr) will be merged into another current course, STAT 705 (2cr), but STAT 705 will become 3 credits. These courses share a considerable amount of underlying content. For instance, both courses cover basic concepts of hypothesis testing and confidence intervals, use of distribution tables, inference and interpretation of results. However, the fact that STAT 704 and STAT 705 are taught separately seems to be causing confusion amongst students, many of whom leave the course sequence with the misunderstanding that linear regression and analysis of variance are completely different statistical methods that are not related to each other. Much to the contrary, both linear regression and analysis of variance are inherently similar and share a common methodological framework. Understanding these similarities is critical for students to be able to effectively apply linear regression, analysis of variance and/or their combination, analysis of covariance, onto their own real data problems. With this change, STAT 704 would no longer be needed.

**IMPACT:** Departments were identified whose students had taken Stat 7054 or 705 during the previous two years and a memo notification was emailed to departmental contacts on February 18, 2013. A copy of this email is attached. The department/program list included: Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural Engineering, Chemical Engineering, Electrical and Computer Engineering Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Anthropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology,. Positive feedback was received by Food Science, Agronomy, IMSE, Animal Sciences and Industry, and Civil Engineering. There were no replies from other programs which was interpreted as not objections. We did not receive any objections to the proposed change. Emails of replies are available upon request.

**EFFECTIVE DATE:** Fall 2014

FROM: ~~STAT 705 – Regression and Correlation Analyses. (2) I, II, S. Multiple regression and correlation concepts and methods; curvilinear regression; applications including use of computers. Note: Meets four times a week during second half of semester. Pr.: One previous statistics course.~~

TO: STAT 705 – Regression and Analysis of Variance. (3) I, II, S. Simple and multiple linear regression, analysis of covariance, correlation analysis, one-, two- and three-way analysis of variance; multiple comparisons; applications including use of computers; blocking and random effects. Pr.: One previous statistics course.

RATIONALE: STAT 704(2cr) is being dropped and its content merged into STAT 705 which will increase from 2 to 3 credits. These courses share a considerable amount of underlying content. The fact that STAT 704 and STAT 705 are taught separately seems to be causing confusion amongst students, many of whom leave the course sequence with the misunderstanding that linear regression and analysis of variance are completely different statistical methods that are not related to each other. Much to the contrary, both linear regression and analysis of variance are inherently similar and share a common methodological framework. Gains in efficiencies when combining two courses with related underlying content will allow the material in two 2 credit courses be covered in one 3 credit course.

IMPACT: Departments were identified whose students had taken Stat 7054 or 705 during the previous two years and a memo notification was emailed to departmental contacts on February 18, 2013. A copy of this email is attached. The department/program list included: Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural Engineering, Chemical Engineering, Electrical and Computer Engineering Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Anthropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology. Positive feedback was received by Food Science, Agronomy, IMSE, Animal Sciences and Industry, and Civil Engineering. There were no replies from other programs which were interpreted as not objections. We did not receive any objections to the proposed change. Emails of replies are available upon request.

EFFECTIVE DATE: Fall 2014

# NON-EXPEDITED CURRICULUM PROPOSALS

## Art

BFA in Art

FROM:

TO:

<p>Photography Curriculum- 23 credit hours</p> <p><del>ART 295</del>- Photo 1 Credits: (3)</p> <p>ART 330 – Digital Techniques Credits: (3)</p> <p>ART 563 – Photo 2 Credits: (3) (<del>may be taken twice</del>)</p> <p>ART 567 – Digital Photo Credits: (3) (<del>may be taken twice</del>)</p> <p>ART 626 – <del>Independent Study in Photography</del> Credits: (3)</p> <p>ART 410 – BFA Exhibition Credits: (2)</p>	<p>Photography Curriculum – 23 credit hours</p> <p><u>ART 395</u> – Photo 1 Credits: (3)</p> <p>ART 330 – Digital Techniques Credits: (3)</p> <p>ART 563 – Photo 2 Credits: (3)</p> <p>ART 567 – Digital Photo Credits: (3)</p> <p>ART 626 – <u>Advanced Study in Photography (must be taken twice in the last year of study)</u> Credits: (3)</p> <p>ART 410 – BFA Exhibition Credits: (2)</p> <p><u>Take one of the following:</u></p> <p><u>ART 563 can be repeated Credits: (3)</u></p> <p><u>ART 567 can be repeated Credits: (3)</u></p>
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**RATIONALE:** To improve the diverse set of courses photo students can choose from, and to make sure they get enough time for developing solid body of work for their BFA shows. Art 626 has to be taken twice (last two semesters).

**IMPACT:** None

**EFFECTIVE DATE:** Spring 2014

## Biology

Fisheries, Wildlife and Conservation Biology B.A./B.S. Block B

FROM:

TO:

<p>Students in this major may obtain either the BA or BS degree. In addition to the requirements of the College of Arts and Sciences, fisheries, wildlife, and conservation biology majors must take the courses of Block A, Block B, and one of the three options of Block C as shown below.</p>	<p>Students in this major may obtain either the BA or BS degree. In addition to the requirements of the College of Arts and Sciences, fisheries, wildlife, and conservation biology majors must take the courses of Block A, Block B, and one of the three options of Block C as shown below.</p>
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<p>Each fisheries, wildlife, and conservation biology major will need to take an additional 10 to 18 credit hours of free electives to meet graduation requirements. Students who wish to qualify for professional certification as fisheries or wildlife biologists should consult their academic advisors about any additional courses needed for such certification.</p> <p>Bachelor's degree requirements Required courses</p> <p>-----</p> <p><b>Block A: Courses offered by other departments</b></p> <p>-----</p> <p>One math course Credits: (3–4) *To be selected from among MATH 100, 150, or 220. Chemistry courses Credits: (13) **To be fulfilled by CHM 210, 230, 350, and 351 or by CHM 210, 230, and BIOCH 265. ** BIOCH 265 - Introductory Organic and Biochemistry Credits: (5) COMM 106 - Public Speaking I Credits: (3) * MATH 100 - College Algebra Credits: (3) or * MATH 150 - Plane Trigonometry Credits: (3) or * MATH 220 - Analytic Geometry and Calculus I Credits: (4) PHYS 113 - General Physics I Credits: (4) and PHYS 114 - General Physics II Credits: (4) or PHYS 115 - Descriptive Physics Credits: (5) STAT 340 - Biometrics I Credits: (3) and STAT 341 - Biometrics II Credits: (3)</p> <p>Students who plan to proceed into graduate programs should take the following:</p> <p>-----</p> <p>** CHM 210 - Chemistry I Credits: (4) ** CHM 230 - Chemistry II Credits: (4) ** CHM 350 - General Organic Chemistry Credits: (3) and ** CHM 351 - General Organic Chemistry Laboratory Credits: (2)</p>	<p>Each fisheries, wildlife, and conservation biology major will need to take an additional 10 to 18 credit hours of free electives to meet graduation requirements. Students who wish to qualify for professional certification as fisheries or wildlife biologists should consult their academic advisors about any additional courses needed for such certification.</p> <p>Bachelor's degree requirements Required courses</p> <p>-----</p> <p><b>Block A: Courses offered by other departments</b></p> <p>-----</p> <p>One math course Credits: (3–4) *To be selected from among MATH 100, 150, or 220. Chemistry courses Credits: (13) **To be fulfilled by CHM 210, 230, 350, and 351 or by CHM 210, 230, and BIOCH 265. ** BIOCH 265 - Introductory Organic and Biochemistry Credits: (5) COMM 106 - Public Speaking I Credits: (3) * MATH 100 - College Algebra Credits: (3) or * MATH 150 - Plane Trigonometry Credits: (3) or * MATH 220 - Analytic Geometry and Calculus I Credits: (4) PHYS 113 - General Physics I Credits: (4) and PHYS 114 - General Physics II Credits: (4) or PHYS 115 - Descriptive Physics Credits: (5) STAT 340 - Biometrics I Credits: (3) and STAT 341 - Biometrics II Credits: (3)</p> <p>Students who plan to proceed into graduate programs should take the following:</p> <p>-----</p> <p>** CHM 210 - Chemistry I Credits: (4) ** CHM 230 - Chemistry II Credits: (4) ** CHM 350 - General Organic Chemistry Credits: (3) and ** CHM 351 - General Organic Chemistry</p>
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MATH 220 - Analytic Geometry and Calculus I Credits: (4)

**Block B: Division of Biology courses**

BIOL 198 - Principles of Biology Credits: (4)  
BIOL 201 - Organismic Biology Credits: (5)  
BIOL 433 - Introduction to Fisheries, Wildlife, and Conservation Biology Credits: (3)  
BIOL 450 - Modern Genetics Credits: (4)  
BIOL 529 - Fundamentals of Ecology Credits: (3)  
BIOL 632 - Ecology Laboratory Credits: (1)  
BIOL 640 - Population Biology Credits: (3)

**Additional requirements**

~~Plus at least two courses in the Division of Biology (400 level or above, or up to 2 hours of BIOL 365 ) totaling 6 credit hours or more.~~

**Block C: Options**

**Fisheries ecology and management option**

BIOL 513 - Physiological Adaptations of Animals Credits: (4)  
BIOL 542 - Ichthyology Credits: (3)  
BIOL 612 - Freshwater Ecology Credits: (4)  
BIOL 682 - Fish Ecology Credits: (3)  
BIOL 696 - Fisheries Management and Techniques Credits: (4)

**Wildlife ecology and management option**

BIOL 513 - Physiological Adaptations of Animals Credits: (4)  
BIOL 543 - Ornithology Credits: (3)  
BIOL 544 - Mammalogy Credits: (3)  
BIOL 551 - Taxonomy of Flowering Plants Credits: (4)  
BIOL 684 - Wildlife Management and Techniques Credits: (4)

**Biodiversity and conservation biology option**

BIOL 500 - Plant Physiology Credits: (3) and  
BIOL 501 – Plant Physiology Laboratory Credits: (1)

Laboratory Credits: (2)  
MATH 220 - Analytic Geometry and Calculus I Credits: (4)

**Block B: Division of Biology courses**

BIOL 198 - Principles of Biology Credits: (4)  
BIOL 201 - Organismic Biology Credits: (5)  
BIOL 433 – Introduction to Fisheries, Wildlife, and Conservation Biology Credits: (3)  
BIOL 450 - Modern Genetics Credits: (4)  
BIOL 529 - Fundamentals of Ecology Credits: (3)  
BIOL 632 - Ecology Laboratory Credits: (1)  
BIOL 640 - Population Biology Credits: (3)

**Additional requirements**

Plus at least two courses beyond those required in Block C, totaling 6 credit hours or more, in the Division of Biology (400 level or above, or up to 2 hours of BIOL 365) or:  
AGCOM 712 – Environmental Communication (3)  
AGEC 525 – Natural Resources and Environmental Economics (3)  
AGRON 305 – Soils (4)  
AGRON 501 - Range Management (3)  
ASI 318 - Fundamentals of Nutrition (3)  
ASI 533 - Anatomy and Physiology (4)  
ENTOM 312 – General Entomology (2)  
ENTOM 313 – General Entomology Lab (1)  
ENTOM 625 - Integrative Behavioral Ecology (3)  
ENTOM 692 - Insect Ecology (3)  
ENTOM 710 - Insect Taxonomy (3)  
GEOG 445 – Biogeography (3)  
GEOG 508 – Geographic Information Systems I (4)  
GEOG 605 – Remote Sensing of the Environment (4)  
GEOG 608 - Geographic Information Systems II (3)  
LAR 322 – Environmental Issues and Ethics (3)  
STAT 703 - Statistical Methods for Natural Scientists (3)  
STAT 704 - Analysis of Variance and Covariance (2)

**Block C: Options**

<p>or          BIOL 513 - Physiological Adaptations of Animals Credits: (4)          BIOL 642 - Principles of Conservation Biology Credits: (3)</p> <p>Plus 11 hours of courses from the following list:          -----          BIOL 542 - Ichthyology Credits: (3)          BIOL 543 - Ornithology Credits: (3)          BIOL 544 - Mammalogy Credits: (3)          BIOL 551 - Taxonomy of Flowering Plants Credits: (4)          BIOL 604 - Biology of the Fungi Credits: (3)          ENTOM 312 - General Entomology Credits: (2) and          ENTOM 313 - General Entomology Laboratory Credits: (1)          FOR 330 - Dendrology I Credits: (2)          FOR 340 - Dendrology II Credits: (2)          Total hours required for graduation (120 credit hours)</p>	<p><b>Fisheries ecology and management option</b>          -----          BIOL 513 - Physiological Adaptations of Animals Credits: (4)          BIOL 542 - Ichthyology Credits: (3)          BIOL 612 - Freshwater Ecology Credits: (4)          BIOL 682 - Fish Ecology Credits: (3)          BIOL 696 - Fisheries Management and Techniques Credits: (4)</p> <p><b>Wildlife ecology and management option</b>          -----          BIOL 513 - Physiological Adaptations of Animals Credits: (4)          BIOL 543 - Ornithology Credits: (3)          BIOL 544 - Mammalogy Credits: (3)          BIOL 551 - Taxonomy of Flowering Plants Credits: (4)          BIOL 684 - Wildlife Management and Techniques Credits: (4)</p> <p><b>Biodiversity and conservation biology option</b>          -----          BIOL 500 - Plant Physiology Credits: (3) and          BIOL 501 – Plant Physiology Laboratory Credits: (1)          or          BIOL 513 - Physiological Adaptations of Animals Credits: (4)          BIOL 642 - Principles of Conservation Biology Credits: (3)</p> <p>Plus 11 hours of courses from the following list:          -----          BIOL 542 - Ichthyology Credits: (3)          BIOL 543 - Ornithology Credits: (3)          BIOL 544 - Mammalogy Credits: (3)          BIOL 551 - Taxonomy of Flowering Plants Credits: (4)          BIOL 604 - Biology of the Fungi Credits: (3)          ENTOM 312 - General Entomology Credits: (2) and          ENTOM 313 - General Entomology Laboratory Credits: (1)          FOR 330 - Dendrology I Credits: (2)          FOR 340 - Dendrology II Credits: (2)          Total hours required for graduation (120 credit hours)</p>
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**RATIONALE:** After consideration of all aspects of this major, it was felt that the main issue is the lack of appropriate and varied choices for the required six elective credits in Block B. Students in this major take varied career paths and existing course choices don't cover subjects that would be helpful in some of these paths. In particular, lack of courses that incorporate a "human dimension" are needed for some professional certification requirements. Additionally, a form to change the BIOL 433 course name is being submitted for approval and this curriculum form reflects the anticipated approval of that change.

**IMPACT:** Horticulture, Forestry & Recreation Resources; Entomology; Agricultural Economics; Agronomy; Statistics; Geography; Animal Sciences & Industry; Communications & Ag Education

**EFFECTIVE DATE:** Spring 2014

Microbiology B.A./B.S. Block C: Microbiology Major Electives

**FROM:**

**TO:**

<p>Students must take an <b>additional 13 credit hours</b> from courses listed below. At least <b>7 of the 13 credit hours must be laboratory courses.</b></p> <ul style="list-style-type: none"> <li>• AGRON 645 - Soil Microbiology <b>Credits:</b> (3)</li> <li>• AGRON 646 - Soil Microbiology Laboratory <b>Credits:</b> (1)</li> <li>• BIOL 410 - Biology of the Cancer Cell <b>Credits:</b> (2)</li> <li>• BIOL 495 - Topics in Biology <b>Credits:</b> (1-6) (1-3 credit hours)</li> <li>• or</li> <li>• BIOL 697 - Topics in Biology <b>Credits:</b> (1-6) (1-3 credit hours)</li> <li>• BIOL 530 - Pathogenic Microbiology <b>Credits:</b> (3) (lab course)</li> <li>• BIOL 545 - Human Parasitology <b>Credits:</b> (3)</li> <li>• BIOL 546 - Human Parasitology Laboratory <b>Credits:</b> (1)</li> <li>• BIOL 604 - Biology of the Fungi <b>Credits:</b> (3) (lab course)</li> <li>• BIOL 609 - Cellular and Molecular Biology of Human Diseases <b>Credits:</b> (3)</li> </ul>	<p>Students must take an <b>additional 13 credit hours</b> from courses listed below. At least <b>7 of the 13 credit hours must be laboratory courses.</b></p> <ul style="list-style-type: none"> <li>• AGRON 645 - Soil Microbiology <b>Credits:</b> (3)</li> <li>• AGRON 646 - Soil Microbiology Laboratory <b>Credits:</b> (1)</li> <li>• BIOL 410 - Biology of the Cancer Cell <b>Credits:</b> (2)</li> <li>• BIOL 495 - Topics in Biology <b>Credits:</b> (1-6) (1-3 credit hours)</li> <li>• or</li> <li>• BIOL 697 - Topics in Biology <b>Credits:</b> (1-6) (1-3 credit hours)</li> <li>• BIOL 530 - Pathogenic Microbiology <b>Credits:</b> (3) (lab course)</li> <li>• BIOL 545 - Human Parasitology <b>Credits:</b> (3)</li> <li>• BIOL 546 - Human Parasitology Laboratory <b>Credits:</b> (1)</li> <li>• BIOL 604 - Biology of the Fungi <b>Credits:</b> (3) (lab course)</li> <li>• BIOL 609 - Cellular and Molecular Biology of Human Diseases <b>Credits:</b> (3)</li> </ul>
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- BIOL 625 - Animal Parasitology **Credits:** (4) (lab course)
- BIOL 671 - Immunology Lab **Credits:** (2)
- BIOL 676 - Molecular Genetics Laboratory **Credits:** (3)
- BIOL 687 - Microbial Ecology **Credits:** (3)
- BIOL 690 - Microbial Physiology and Metabolism **Credits:** (2)
- BIOL 698 - Problems in Biology **Credits:** (1-8) (lab course)
- (1-3 credit hours)
- BIOL 705 - Eukaryotic Genetics **Credits:** (3)
- BIOL 707 - Advanced Cell Biology **Credits:** (3)
- BIOL 730 - General Virology **Credits:** (3)
- BIOL 731 - Virology Laboratory **Credits:** (2)

**Note:**

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By consultation with a Division of Biology advisor a student may choose elective courses from Block C that allow a more specific focus on interest and experience. Areas of specialization would include prokaryotic microbiology, eukaryotic microbiology, biotechnology/genetic engineering, and infectious diseases. The microbiology curriculum coupled with appropriate electives provides an excellent education base for students moving directly into the job market, for students headed toward medical, dental, medical technology, and veterinary programs, and for students going into graduate programs in the biological sciences.

**Total hours required for graduation (120 credit hours)**

- BIOL 625 - Animal Parasitology **Credits:** (4) (lab course)
- BIOL 671 - Immunology Lab **Credits:** (2)
- BIOL 676 - Molecular Genetics Laboratory **Credits:** (3)
- BIOL 687 - Microbial Ecology **Credits:** (3)
- BIOL 690 - Microbial Physiology and Metabolism **Credits:** (2)
- BIOL 698 - Problems in Biology **Credits:** (1-8) (lab course)
- (1-3 credit hours)
- BIOL 705 - Eukaryotic Genetics **Credits:** (3)
- BIOL 707 - Advanced Cell Biology **Credits:** (3)
- BIOL 730 - General Virology **Credits:** (3)
- BIOL 731 - Virology Laboratory **Credits:** (2)
- FDSCI 600 – Food Microbiology **Credits:** (2)
- FDSCI 601 – Food Microbiology Lab **Credits:** (2)

**Note:**

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By consultation with a Division of Biology advisor a student may choose elective courses from Block C that allow a more specific focus on interest and experience. Areas of specialization would include prokaryotic microbiology, eukaryotic microbiology, biotechnology/genetic engineering, and infectious diseases. The microbiology curriculum coupled with appropriate electives provides an excellent education base for students moving directly into the job market, for students headed toward medical, dental, medical technology, and veterinary programs, and for students going into graduate programs in the biological sciences.

**Total hours required for graduation (120 credit hours)**

**RATIONALE:** FDSCI 607 Food Microbiology (4 cr. Hrs.) was an elective in the Microbiology B.A./B.S. program until it was split into a separate lecture and laboratory and renumbered FDSCI 600 Food Microbiology (2 cr. Hrs.) and FDSCI 601 Food Microbiology Lab (2 cr. hrs.). FDSCI 607 was subsequently dropped from the Microbiology electives. We would like to add FDSCI 600 and FDSCI 601 to the list of microbiology electives to replace the dropped course FDSCI 607.

**IMPACT:** None

**EFFECTIVE DATE:** Spring 2014

## Statistics

BA/BS degrees

**FROM:**

**TO:**

<ul style="list-style-type: none"> <li>• <a href="#">MATH 220</a> Analytic Geometry and Calculus I (4 hours)</li> <li>• <a href="#">MATH 221</a> Analytic Geometry and Calculus II (4 hours)</li> <li>• <a href="#">MATH 222</a> Analytic Geometry and Calculus III (4 hours)</li> <li>• One of: <a href="#">CIS 200</a> Fundamentals of Software Design (4 hours) or <a href="#">CIS 111</a> Fundamentals of Computer Programming (3 hours)</li> <li>• One course selected from <a href="#">MATH 551</a>, <a href="#">CIS 209</a>, <a href="#">CIS 300</a> (3 hours)</li> <li>• <a href="#">ENGL 516</a> Written Communication for the Sciences (3 hours)</li> <li>• One of <a href="#">STAT 325</a>, <a href="#">340</a> or <a href="#">350</a> (3 hours) (Note: STAT 320 and 330 are now combined into STAT 325.)</li> <li>• <a href="#">STAT 341</a> or <a href="#">351</a> (3 hours) (Note: STAT courses at the 400 level or higher may replace either or both of the 300-level STAT courses.)</li> <li>• <a href="#">STAT 510</a> &gt;Introductory Probability and Statistics I (3 hours)</li> <li>• <a href="#">STAT 511</a> Introductory Probability and Statistics II (3 hours)</li> <li>• <del><a href="#">STAT 704</a> — Analysis of Variance and Covariance (2 hours)</del></li> <li>• <del><a href="#">STAT 705</a> Regression and Correlation Analyses (2 hours)</del></li> <li>• One of <a href="#">STAT 710</a>, <a href="#">720</a>, or <a href="#">722</a> (2-3 hours)</li> <li>• One additional STAT course at 700 level</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">MATH 220</a> Analytic Geometry and Calculus I (4 hours)</li> <li>• <a href="#">MATH 221</a> Analytic Geometry and Calculus II (4 hours)</li> <li>• <a href="#">MATH 222</a> Analytic Geometry and Calculus III (4 hours)</li> <li>• One of: <a href="#">CIS 200</a> Fundamentals of Software Design (4 hours) or <a href="#">CIS 111</a> Fundamentals of Computer Programming (3 hours)</li> <li>• One course selected from <a href="#">MATH 551</a>, <a href="#">CIS 209</a>, <a href="#">CIS 300</a> (3 hours)</li> <li>• <a href="#">ENGL 516</a> Written Communication for the Sciences (3 hours)</li> <li>• One of <a href="#">STAT 325</a>, <a href="#">340</a> or <a href="#">350</a> (3 hours) (Note: STAT 320 and 330 are now combined into STAT 325.)</li> <li>• <a href="#">STAT 341</a> or <a href="#">351</a> (3 hours) (Note: STAT courses at the 400 level or higher may replace either or both of the 300-level STAT courses.)</li> <li>• <a href="#">STAT 510</a> &gt;Introductory Probability and Statistics I (3 hours)</li> <li>• <a href="#">STAT 511</a> Introductory Probability and Statistics II (3 hours)</li> <li>• <a href="#">STAT 705</a> <u>Regression and Analysis of Variance (3 hours)</u></li> <li>• One of <a href="#">STAT 710</a>, <a href="#">720</a>, or <a href="#">722</a> (2-3 hours)</li> <li>• Additional STAT credits at 700 level (<u>3 hours</u>)</li> <li>• Upper-division quantitative electives to</li> </ul>
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<p>(2-3 hours)</p> <ul style="list-style-type: none"> <li>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. Note that STAT courses at the 400 level or higher may replace either or both of the 300 level STAT courses.</li> <li>A minimum of 2.0 GPA in STAT courses taken as part of the major is required for graduation.</li> </ul>	<p>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. Note that STAT courses at the 400 level or higher may replace either or both of the 300 level STAT courses.</p> <ul style="list-style-type: none"> <li>A minimum of 2.0 GPA in STAT courses taken as part of the major is required for graduation.</li> </ul>
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**RATIONALE:** STAT 704 (2cr) is being dropped and its content merged into Stat 705 which will increase from 2 to 3 credits. These courses share a considerable amount of underlying content. The fact that STAT 704 and STAT 705 are taught separately seems to be causing confusion amongst students, many of whom leave the course sequence with the misunderstanding that linear regression and analysis of variance are completely different statistical methods that are not related to each other. Much to the contrary, both linear regression and analysis of variance are inherently similar and share a common methodological framework. Gains in efficiencies when combining two courses with related underlying content will allow the material in two 2 credit courses to be covered in one 3 credit course.

**IMPACT:** Departments were identified whose students had taken Stat 704 or 705 during the previous two years and a memo notification was emailed to departmental contacts on February 18, 2013. A copy of this email is attached. The department/program list included: Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural Engineering, Chemical Engineering, Electrical and Computer Engineering, Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture Forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel Textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Antropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology. Positive feedback was received by Food Science, Agronomy, IMSE, Animal Sciences and Industry, and Civil Engineering. There were no replies from the other programs which was interpreted as no objections.

We did not receive any objections to the proposed change. Emails of replies are available upon request.

EFFECTIVE DATE:            Fall 2014

Statistics Minor

FROM:

TO:

<p>Students interested in quantitative methods to complement their major area of study may select a minor in statistics. The requirements are:</p> <ol style="list-style-type: none"><li>1. One of: STAT 325, 340, 350, 510</li><li>2. One of: STAT 341, 351, 511</li><li>3. <del>Both:</del> STAT <del>704 and</del> 705</li><li>4. Five additional hours that require statistics as a prerequisite. Courses may be statistics courses or quantitative courses from another department containing substantial statistical content. These courses should be pre-approved by the Department of Statistics.</li></ol>	<p>Students interested in quantitative methods to complement their major area of study may select a minor in statistics. The requirements are:</p> <ol style="list-style-type: none"><li>1. One of: STAT 325, 340, 350, 510</li><li>2. One of: STAT 341, 351, 511</li><li>3. STAT 705</li><li>4. <del>Five-Six</del> additional hours that require statistics as a prerequisite. Courses may be statistics courses or quantitative courses from another department containing substantial statistical content. These courses should be pre-approved by the Department of Statistics.</li></ol>
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**RATIONALE:**            STAT 704 (2cr) is being dropped and its content merged into Stat 705 which will increase from 2 to 3 credits. These courses share a considerable amount of underlying content. The fact that STAT 704 and STAT 705 are taught separately seems to be causing confusion amongst students, many of whom leave the course sequence with the misunderstanding that linear regression and analysis of variance are completely different statistical methods that are not related to each other. Much to the contrary, both linear regression and analysis of variance are inherently similar and share a common methodological framework. Gains in efficiencies when combining two courses with related underlying content will allow the material in two 2 credit courses to be covered in one 3 credit course.

**IMPACT:**            Departments were identified whose students had taken Stat 704 or 705 during the previous two years and a memo notification was emailed to departmental contacts on February 18, 2013. A copy of this email is attached. The department/program list included: Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural

Engineering, Chemical Engineering, Electrical and Computer Engineering, Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture Forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel Textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Anthropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology. Positive feedback was received by Food Science, Agronomy, IMSE, Animal Sciences and Industry, and Civil Engineering. There were no replies from the other programs which was interpreted as no objections. We did not receive any objections to the proposed change. Emails of replies are available upon request.

EFFECTIVE DATE: Fall 2014

Statistics – Graduate Certificate in Applied Statistics

FROM:

TO:

<p>A minimum of 15 credit hours with at least a 3.0 GPA in applied statistics courses at the 700 level and above. These courses may also be used for a student's Program of Study in his/her chosen field if approved by the student's Graduate Committee.</p> <p>Courses that can be used for the Graduate Certificate in Applied Statistics Program are:</p> <ul style="list-style-type: none"> <li>• STAT 701, 702, 703, or 706 (3 hrs)</li> <li>• STAT <del>704</del>, 705 or STAT 713 (4 hrs)</li> <li>• STAT 710 (2 hrs)</li> <li>• STAT 716 (2 hrs)</li> <li>• STAT 717 (3 hrs)</li> <li>• STAT 720 (3 hrs)</li> <li>• STAT 722 (3 hrs)</li> <li>• STAT 725 (1 hr)</li> <li>• STAT 726 (1 hr)</li> <li>• STAT 730 (3 hrs)</li> <li>• STAT 736 (2 hrs)</li> <li>• STAT 745 (3 hrs)</li> <li>• STAT 870 (3 hrs)</li> </ul>	<p>A minimum of 15 credit hours with at least a 3.0 GPA in applied statistics courses at the 700 level and above. These courses may also be used for a student's Program of Study in his/her chosen field if approved by the student's Graduate Committee.</p> <p>Courses that can be used for the Graduate Certificate in Applied Statistics Program are:</p> <ul style="list-style-type: none"> <li>• STAT 701, 702, 703, or 706 (3 hrs)</li> <li>• STAT 705 or STAT 713 (<del>4</del><u>3</u> hrs)</li> <li>• STAT 710 (2 hrs)</li> <li>• STAT 716 (2 hrs)</li> <li>• STAT 717 (3 hrs)</li> <li>• STAT 720 (3 hrs)</li> <li>• STAT 722 (3 hrs)</li> <li>• STAT 725 (1 hr)</li> <li>• STAT 726 (1 hr)</li> <li>• STAT 730 (3 hrs)</li> <li>• STAT 736 (2 hrs)</li> <li>• STAT 745 (3 hrs)</li> <li>• STAT 870 (3 hrs)</li> </ul> <p>(note: Stat 713 is already a 3 credit course)</p>
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RATIONALE: STAT 704 (2cr) is being dropped and its content merged into Stat 705 which will increase from 2 to 3 credits. These courses share a considerable

amount of underlying content. The fact that STAT 704 and STAT 705 are taught separately seems to be causing confusion amongst students, many of whom leave the course sequence with the misunderstanding that linear regression and analysis of variance are completely different statistical methods that are not related to each other. Much to the contrary, both linear regression and analysis of variance are inherently similar and share a common methodological framework. Gains in efficiencies when combining two courses with related underlying content will allow the material in two 2 credit courses to be covered in one 3 credit course.

**IMPACT:** Departments were identified whose students had taken Stat 704 or 705 during the previous two years and a memo notification was emailed to departmental contacts on February 18, 2013. A copy of this email is attached. The department/program list included: Agronomy, Food Science, IMSE, Animal Sciences and Industry, Civil Engineering, College of Education, Anatomy and Physiology, Diagnostic Medicine, Master in Public Health program, Agricultural and Biological Engineering, Mechanical and Nuclear Engineering, Architectural Engineering, Chemical Engineering, Electrical and Computer Engineering, Chemistry, Geography, Biology, Plant Pathology, Grain Science and Industry, Agricultural Economics, Entomology, Horticulture Forestry and Recreational Services, Landscape Architecture, Business Administration Dean's office, Accounting, Human Ecology Dean's office, Human Nutrition, Apparel Textiles and Interior Design, Hospitality Management and Dietetics, Mathematics, Sociology Antropology and Social Work, English, Kinesiology, Journalism, Economics, Psychology. Positive feedback was received by Food Science, Agronomy, IMSE, Animal Sciences and Industry, and Civil Engineering. There were no replies from the other programs which was interpreted as no objections. We did not receive any objections to the proposed change. Emails of replies are available upon request.

**EFFECTIVE DATE:** Fall 2014

# TABLED

## Dean of Arts and Sciences

### Humanities Interdisciplinary BA Degree

FROM:

TO:

<b>Humanities Interdisciplinary BA Degree</b>	<b>Humanities Interdisciplinary BA/BS Degree</b>
<p>Humanities is a multidisciplinary major that deals with human thought and culture. Creativity, imagination, and interpretation are central to humanistic study. The humanities disciplines include art, art history, creative writing, dance, history, literature, modern languages, music, philosophy, communication studies, theater, and <del>selected women's studies and American ethnic studies courses</del>. A humanities major leads to the <del>traditional liberal arts degree, the bachelor of arts</del>.</p> <p><del>Students develop a plan of study with an interdisciplinary humanities advisor in the College of Arts and Sciences dean's office, who acts as a liaison with the Humanities Advisory Committee. The student also confers with other humanities faculty members who have expertise in the areas of the student's interest. The student's proposal must include a rationale or thematic design for the interdisciplinary degree and a tentative listing of courses. The proposal must be approved by the Humanities Advisory Committee. This procedure must be accomplished before or during the semester in which the student completes 90 credit hours toward the degree.</del></p> <p><del>The humanities major consists of 36 credit hours. Students must select two humanities disciplines and complete 15 credit hours in each discipline, including at least 6 credit hours of 500-699 level course work in one discipline and 9 credit hours of 500-699 level course work in the second discipline. Six credit hours of humanities electives are also required.</del></p> <p><del>Up to 9 credit hours of major coursework may be applied to basic requirements of the BA degree. Courses used in the two selected disciplines may not also be applied toward another major. Students who select music as one discipline must seek additional advising in the music department.</del></p> <p>A 2.0 GPA in the major is required for graduation.</p>	<p>Humanities is a multidisciplinary major that deals with human thought and culture. <u>Cultural study enables students to understand their own places in existing traditions contribute positively to the development of new ones.</u> Creativity, imagination, and interpretation are central to humanistic study. The humanities disciplines include <u>American ethnic studies, anthropology,</u> art, art history, creative writing, dance, <u>history,</u> literature, modern languages, music, philosophy, communication studies, theater, and women's studies.</p> <p><u>A student works closely with an interdisciplinary humanities advisor in the College of Arts and Sciences deans' office to develop a plan of study with a thematic emphasis. The student's humanities advisor may encourage him or her to confer with other humanities faculty members who have expertise in the area of the student's interest. Students who select music as a thematic emphasis must seek additional advising in the music department. The humanities major consists of 36 credit hours in two or more humanities disciplines. In general, only one course outside the stipulated humanities disciplines may be used to count toward the major, if the course fits the student's theme. At least 15 credit hours must be completed in humanities disciplines at the 500-699 level. Up to 9 credit hours of major coursework may be applied to basic requirements of the degree.</u></p> <p>A 2.0 GPA in the major is required for graduation.</p>

**RATIONALE:** For a number of years, the Humanities interdisciplinary BA degree has been offered by the College of Arts and Sciences. It is one of four interdisciplinary degrees (Physical Science, Social Science, Life Science) offered through the college. Advisors in the Deans' Office provide the vast majority of the advising for all interdisciplinary majors, including the Humanities B.A. For years, enrollment in the Humanities B.A. has lagged behind the other interdisciplinary majors. Over the past eight years, fewer than fifteen students a year have graduated with this degree. The Deans' office has considered eliminating the degree, but we find that it fulfills the needs of students whose interests encompass more than one humanities discipline. The Deans' Office proposes ways to address the issue of low enrollments by changing the structure of the Humanities degree to be more consistent with the college's other interdisciplinary degrees, which offer students more latitude to fulfill degree requirements. To this end, the Deans' office proposes to 1) accept courses for the degree from an additional number of humanities based programs; 2) allow students to develop their emphases in "two or more" majors, instead of limiting it to just two; and 3) offer a B.S. option in addition to the existing B.A. The changes to the catalogue are provided below. The rationale for these changes follows.

Rationale: 1. The purpose of the interdisciplinary majors at K-State is to "create individual fields of emphasis for people who want to pursue multidisciplinary solutions to today's complex problems." The proposed changes align the humanities degree with the breadth of the other interdisciplinary majors and establish consistency in interdisciplinary degree requirements. These changes also mean that students can craft an interdisciplinary program, versus one focused on offerings from only two humanities majors.

2. Some students have pursued a single major, but life circumstances may require an expedited or online path to graduation. This degree may reach students who may otherwise fail to graduate.

3. History and Communication Studies are humanities that are also regarded as social sciences, and they are already included in the discipline options for the humanities degree. American Ethnic Studies and Women's Studies courses are currently used in the Humanities category for Western Heritage. Areas of anthropologic study include humanities areas such as archeology and linguistics. Further expanding the areas of study will assist students who have an interest in exploring these cultural areas with an interdisciplinary lens.

4. Philosophy, Communication Studies and History are examples of humanities disciplines that are conferred as either B.A. or B.S. This option also will make the degree more attractive to distance education students who want to complete their degree at K-State as language courses are not offered online.

**IMPACT:** None

**EFFECTIVE DATE:** Spring 2014