# Attachment 1

Academic Affairs Consent Agenda Supplemental Information

# **College of Business Administration (3-15-17)**

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# College of Business Administration (3-15-17)

**Department of Finance** 

#### Finance

# Financial Management (FINAN-FM)

# Change in Major Field Electives

http://catalog.k-state.edu/preview\_program.php?catoid=13&poid=3384

Change From:	Change To:
Finance (B.S.)	Finance (B.S.)
The finance curriculum allows the student to specialize	The finance curriculum allows the student to specialize
in financial management, financial controllership, or	in financial management, financial controllership, or
financial services.	financial services.
The financial management option provides the	The financial management option provides the
student with the analytical skills for the analysis,	student with the analytical skills for the analysis,
evaluation, and reporting of financial information.	evaluation, and reporting of financial information.
These activities are ultimately used in managerial	These activities are ultimately used in managerial
decision making by businesses and regulatory	decision making by businesses and regulatory
agencies. This option is designed for graduates who	agencies. This option is designed for graduates who
wish to pursue a career as a financial manager or	wish to pursue a career as a financial manager or
analyst.	analyst.
The financial controllership option supplements the	The financial controllership option supplements the
analytical focus of the financial management track	analytical focus of the financial management track
with additional accounting skills. This option is	with additional accounting skills. This option is
designed for those who intend to pursue careers	designed for those who intend to pursue careers
related to the controllership function of a firm.	related to the controllership function of a firm.
The financial services option provides a broad	The financial services option provides a broad
knowledge of financial markets, institutions, and	knowledge of financial markets, institutions, and
services and prepares the student for providing	services and prepares the student for providing
financial products and services to the consumer.	financial products and services to the consumer.
Graduates in this option typically seek careers in	Graduates in this option typically seek careers in
banking, consumer lending, brokerage services,	banking, consumer lending, brokerage services,
financial planning, portfolio management, and real	financial planning, portfolio management, and real
estate.	estate.
Finance majors are expected to develop a broad	Finance majors are expected to develop a broad
understanding of business management, accounting,	understanding of business management, accounting,
economic theory, management information systems,	economic theory, management information systems,
and quantitative techniques. In addition, effective	and quantitative techniques. In addition, effective
written and oral communication skills and the ability	written and oral communication skills and the ability
to work in groups are essential for a successful career	to work in groups are essential for a successful career
in finance. The curriculum of the Department of	in finance. The curriculum of the Department of
Finance is designed to help the student develop these	Finance is designed to help the student develop these
necessary skills through active learning methods.	necessary skills through active learning methods.
<b>Bachelor's degree requirements</b>	<b>Bachelor's degree requirements</b>
Business Administration Pre-Professions Program (54 credit hours)	Business Administration Pre-Professions Program (54 credit hours)

Business Core (30 credit hours)	Business Core (30 credit hours)
Major field requirements (15 credit hours)	Major field requirements (15 credit hours)
<ul> <li>ACCTG 331 - Intermediate Accounting Processes Credits: 3</li> <li>FINAN 510 - Financial Institutions and Markets Credits: 3</li> <li>FINAN 520 - Investments Credits: 3</li> <li>FINAN 575 - Intermediate Finance Credits: 3</li> <li>FINAN 675 - Cases in Finance Credits: 3</li> </ul>	<ul> <li>ACCTG 331 - Intermediate Accounting Processes Credits: 3</li> <li>FINAN 510 - Financial Institutions and Markets Credits: 3</li> <li>FINAN 520 - Investments Credits: 3</li> <li>FINAN 575 - Intermediate Finance Credits: 3</li> <li>FINAN 675 - Cases in Finance Credits: 3</li> </ul>
<ul> <li>Economics Electives (6 credit hours)</li> <li>1. Economics electives must be selected from economics course offerings numbered 500 or above (excluding ECON 505) in consultation with the student's academic advisor.</li> <li>2. Economics electives may not overlap with economics courses used to complete a requirement within the finance major.</li> <li>Economics elective Credits: (3)</li> </ul>	<ul> <li>Economics Electives (6 credit hours)</li> <li>3. Economics electives must be selected from economics course offerings numbered 500 or above (excluding ECON 505) in consultation with the student's academic advisor.</li> <li>4. Economics electives may not overlap with economics courses used to complete a requirement within the finance major.</li> <li>Economics elective Credits: (3)</li> </ul>
<ul> <li>ECON 510 - Intermediate Macroeconomics Credits: 3 or</li> <li>ECON 520 - Intermediate Microeconomics Credits: 3</li> </ul>	<ul> <li>ECON 510 - Intermediate Macroeconomics Credits: 3 or</li> <li>ECON 520 - Intermediate Microeconomics Credits: 3</li> </ul>
Unrestricted electives (9 credit hours) Any course numbered 100-level or above offered for credit by a university department. Students are strongly encouraged to use their unrestricted electives to complete for-credit experiential learning opportunities, such as internships, community service/engagement, and study abroad.	Unrestricted electives (9 credit hours) Any course numbered 100-level or above offered for credit by a university department. Students are strongly encouraged to use their unrestricted electives to complete for-credit experiential learning opportunities, such as internships, community service/engagement, and study abroad.
Financial Controllership (FC) Option (12 credit hours)	Financial Controllership (FC) Option (12 credit hours)
<ul> <li>ACCTG 342 - Taxation I Credits: 3</li> <li>ACCTG 413 - Accounting Information Systems Credits: 3</li> <li>ACCTG 432 - Managerial Reporting Credits: 3</li> <li>ACCTG 433 - Financial Reporting Credits: 3</li> </ul>	<ul> <li>ACCTG 342 - Taxation I Credits: 3</li> <li>ACCTG 413 - Accounting Information Systems Credits: 3</li> <li>ACCTG 432 - Managerial Reporting Credits: 3</li> <li>ACCTG 433 - Financial Reporting Credits: 3</li> </ul>
Financial Management (FM) Option (12 credit hours)	Financial Management (FM) Option (12 credit hours)
<ul> <li>ACCTG 433 - Financial Reporting Credits: 3 Choose 9 credit hours from the following:</li> <li>FINAN 643 - International Financial Management Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis Credits: 3</li> <li>FINAN 654 - Derivative Securities and Markets Credits: 3</li> </ul>	<ul> <li>ACCTG 433 - Financial Reporting Credits: 3</li> <li>Choose 9 credit hours from the following:         <ul> <li><u>FINAN 623 Financial Modeling Credits: 3</u></li> <li>FINAN 643 - International Financial Management Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis Credits: 3</li> <li>FINAN 654 - Derivative Securities and Markets Credits: 3</li> </ul> </li> </ul>
Financial Services (FS) Option (12 credit hours)	Financial Services (FS) Option (12 credit hours)

Choose <b>12 credit hours</b> from the following:	Choose <b>12 credit hours</b> from the following:
<ul> <li>ACCTG 445 - Financial Statement Analysis</li></ul>	<ul> <li>ACCTG 445 - Financial Statement Analysis</li></ul>
Credits: 3 <li>FINAN 460 - Insurance Credits: 3</li> <li>FINAN 531 - Commercial Banking Credits: 3</li> <li>FINAN 552 - Real Estate Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis</li>	Credits: 3 <li>FINAN 460 - Insurance Credits: 3</li> <li>FINAN 531 - Commercial Banking Credits: 3</li> <li>FINAN 552 - Real Estate Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis</li>
Credits: 3 <li>FINAN 654 - Derivative Securities and</li>	Credits: 3 <li>FINAN 654 - Derivative Securities and</li>
Markets Credits: 3 <li>FINAN 661 - Professional Financial Planning</li>	Markets Credits: 3 <li>FINAN 661 - Professional Financial Planning</li>
Credits: 3	Credits: 3

#### Rationale

Change to add new course FINAN 623 Financial Modeling as an option for Financial Management (FINAN-FM).

Impact On Other Units None

Effective Date Spring 2018

## Integrated Investment Management Certificate

http://catalog.k-state.edu/preview\_program.php?catoid=13&poid=3381

Change From: Change To:	
Integrated Investment Management Certificate	Integrated Investment Management Certificate
<ul> <li>The Certificate in Integrated Investment Management is intended for those business majors whose career interests lie in the investment management industry. The required courses are designed to provide these students with the fundamentals of investment management and a broader business perspective of the investment management industry. After completing this certificate students will be able to: <ul> <li>Apply the principles of financial analysis to issues specific to the investment management industry, including the valuation of financial assets using fundamental analysis, the use of technical analysis for asset selection, and trading of assets in financial markets.</li> <li>Describe the role of each of the four major functional areas (accounting, finance, management, marketing, and information technology) in the investment management firm and illustrate the contributions of these areas to the success of the firm.</li> <li>Explore the legal and ethical environments within which investment management firms operate.</li> <li>Analyze financial statements and show their relationship to security valuation.</li> <li>Identify personal and professional skills necessary for success in the investment management industry.</li> </ul> </li> </ul>	<ul> <li>The Certificate in Integrated Investment Management is intended for those business majors whose career interests lie in the investment management industry. The required courses are designed to provide these students with the fundamentals of investment management and a broader business perspective of the investment management industry. After completing this certificate students will be able to: <ul> <li>Apply the principles of financial analysis to issues specific to the investment management industry, including the valuation of financial assets using fundamental analysis, the use of technical analysis for asset selection, and trading of assets in financial markets.</li> <li>Describe the role of each of the four major functional areas (accounting, finance, management, marketing, and information technology) in the investment management firm and illustrate the contributions of these areas to the success of the firm.</li> <li>Explore the legal and ethical environments within which investment management firms operate.</li> <li>Analyze financial statements and show their relationship to security valuation.</li> <li>Identify personal and professional skills necessary for success in the investment management industry.</li> </ul> </li> </ul>
Students enrolled in the Certificate program will have the opportunity to apply their discipline-specific knowledge to the management of the College's Student Investment Portfolio (SIP). This portfolio is actively managed by finance majors enrolled in FINAN 653 (Security and Portfolio Analysis). These students make all investment decisions for the portfolio. The Certificate program will allow interested business students from all majors in the College to participate in and interact with the SIP. By integrating the SIP	Students enrolled in the Certificate program will have the opportunity to apply their discipline-specific knowledge to the management of the College's Student Investment Portfolio (SIP). This portfolio is actively managed by finance majors enrolled in FINAN 653 (Security and Portfolio Analysis). These students make all investment decisions for the portfolio. The Certificate program will allow interested business students from all majors in the College to participate in and interact with the SIP. By integrating the SIP

within the Certificate program, students will be able to	within the Certificate program, students will be able to
apply knowledge within their specific functional area	apply knowledge within their specific functional area
(accounting, finance, management, marketing, and	(accounting, finance, management, marketing, and
information technology) to the management of the	information technology) to the management of the
portfolio.	portfolio.
Students who have earned this Certificate will be able	Students who have earned this Certificate will be able
to distinguish themselves by demonstrating	to distinguish themselves by demonstrating
competency in the investment management industry,	competency in the investment management industry,
thereby enhancing their ability to better compete for	thereby enhancing their ability to better compete for
jobs within the investment management and financial	jobs within the investment management and financial
services industries.	services industries.
<b>Certificate Requirements</b>	<b>Certificate Requirements</b>
All students enrolled in the Certificate will take 9	All students enrolled in the Certificate will take 9
credit hours of the core, and choose six credit hours	credit hours of the core, and choose six credit hours
from eligible electives.	from eligible electives.
<ul> <li>Integrated Investment Management Core Courses (9 credit hours)</li> <li>FINAN 450 - Principles of Finance Credits: 3</li> <li>FINAN 451 - Introduction to Integrated Investment Management Credits: 3</li> <li>FINAN 500 - Investment Management Concepts Credits: 3</li> </ul>	<ul> <li>Integrated Investment Management Core Courses (9 credit hours)</li> <li>FINAN 450 - Principles of Finance Credits: 3</li> <li>FINAN 451 - Introduction to Integrated Investment Management Credits: 3</li> <li>FINAN 500 - Investment Management Concepts Credits: 3</li> </ul>
<ul> <li>Elective Courses (6 credit hours)</li> <li>Select 2 of the following four courses         <ul> <li>ACCTG 445 - Financial Statement Analysis Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis Credits: 3</li> <li>MANGT 566 - Computer Systems for Finance and Investment Management Credits: 3</li> <li>MKTG 497 - Topics in Financial Services Marketing Credits: 3</li> </ul> </li> </ul>	<ul> <li>Elective Courses (6 credit hours)</li> <li>Select 2 of the following four courses <ul> <li>ACCTG 445 - Financial Statement Analysis</li> <li>Credits: 3</li> <li>FINAN 623 - Financial Modeling Credits: 3</li> <li>FINAN 653 - Security and Portfolio Analysis</li> <li>Credits: 3</li> <li>MANGT 566 - Computer Systems for Finance and Investment Management Credits: 3</li> </ul> </li> </ul>
<b>Course and Certificate Completion Notes</b>	<b>Course and Certificate Completion Notes</b>
Students must earn a minimum of 2.5 GPA on courses	Students must earn a minimum of 2.5 GPA on courses
taken to fulfill the requirements of the Certificate in	taken to fulfill the requirements of the Certificate in
Integrated Investment Management.	Integrated Investment Management.
No more than 25% of total credit hours required for	No more than 25% of total credit hours required for
the certificate may be transfer credits. Students must	the certificate may be transfer credits. Students must
earn at least 75% of credits that apply to the	earn at least 75% of credits that apply to the
certificate from Kansas State University or an	certificate from Kansas State University or an
approved university affiliate of Kansas State University	approved university affiliate of Kansas State University
in a foreign country.	in a foreign country.
Students will be able to substitute FINAN 510 and	Students will be able to substitute FINAN 510 and
FINAN 520 (both must be completed) for FINAN 500.	FINAN 520 (both must be completed) for FINAN 500.
<ul> <li>FINAN 510 - Financial Institutions and Markets Credits: 3 and</li> <li>FINAN 520 - Investments Credits: 3 Certificate can be completed by degree seeking students at Kansas State University or obtained as a credential on its own (free-standing). Students who do</li> </ul>	<ul> <li>FINAN 510 - Financial Institutions and Markets Credits: 3 and</li> <li>FINAN 520 - Investments Credits: 3</li> <li>Certificate can be completed by degree seeking students at Kansas State University or obtained as a credential on its own (free-standing). Students who do</li> </ul>

not intend to become a candidate for a bachelor's

not intend to become a candidate for a bachelor's

degree at Kansas State University must apply for degree at Kansas State University must apply for admission as a non-degree, certificate-seeking admission as a non-degree, certificate-seeking student. Such students must submit the admission student. Such students must submit the admission application, application fee, and transcripts. application, application fee, and transcripts. Applicants must provide documentation of high school Applicants must provide documentation of high school or GED completion and, if college courses have been or GED completion and, if college courses have been attempted, official transcripts demonstrating a attempted, official transcripts demonstrating a cumulative GPA of 2.0 or higher for all post-secondary cumulative GPA of 2.0 or higher for all post-secondary coursework. Students who later choose to pursue a coursework. Students who later choose to pursue a bachelor's degree must apply for admission as a bachelor's degree must apply for admission as a degree-seeking student. degree-seeking student. Total credit hours: (15) Total credit hours: (15)

#### Rationale

Change to remove MKTG 497 Topics in Financial Services Marketing as an elective course for the certificate since it is no longer being taught and to add new course FINAN 623 Financial Modeling as an elective course.

Impact On Other Units None

Effective Date Spring 2018

# Department of Management Data Analytics Certificate

http://catalog.k-state.edu/preview\_program.php?catoid=13&poid=10774

Change From:	Change To:
Data analytics (DA) is the extensive use of analytical	Data analytics (DA) is the extensive use of analytical
tools and technologies to develop insights from	tools and technologies to develop insights from
structured and unstructured data ("big data"). There is	structured and unstructured data ("big data"). There is
an increasing demand for managers and analysts with	an increasing demand for managers and analysts with
talents ("data savvy") in managing and analyzing data	talents ("data savvy") in managing and analyzing data
and applying the findings to fact-based decisions,	and applying the findings to fact-based decisions,
action, and learning.	action, and learning.
The purpose of the Certificate in DA is to provide an	The purpose of the Certificate in DA is to provide an
opportunity for K-State students to develop strong	opportunity for K-State students to develop strong
talent in such areas as data-driven problem	talent in such areas as data-driven problem
understanding and solving, data collection and	understanding and solving, data collection and
management, information visualization, and	management, information visualization, and
storytelling. The DA certificate will help K-State	storytelling. The DA certificate will help K-State
students to distinguish themselves as "data savvv" in	students to distinguish themselves as "data savvy" in
their professional fields.	their professional fields.
Other Requirements:	Other Requirements:
• Students must earn at least a 2.5 GPA on all	<ul> <li>Students must earn at least a 2.5 GPA on all</li> </ul>
courses taken to fulfill the requirements of	courses taken to fulfill the requirements of
the certificate program.	the certificate program.
• The certificate will be issued by the K-State	• The certificate will be issued by the K-State
College of Business Administration and noted	College of Business Administration and noted
on the transcript.	on the transcript.
Ine certificate can be earned post-	Ihe certificate can be earned post-
baccalaureate.	baccalaureate.
Certificate can be completed by degree	Certificate can be completed by degree
seeking students at Kansas State University or	seeking students at Kansas State University or
obtained as a credential on its own (free-	obtained as a credential on its own (free-
standing). Students who do not intend to	standing). Students who do not intend to
become a candidate for a bachelor's degree	become a candidate for a bachelor's degree
at Kansas State University must apply for	at Kansas State University must apply for
admission as a non-degree, certificate-	admission as a non-degree, certificate-
seeking student. Such students must	seeking student. Such students must
submit the admission application, application	submit the admission application, application
fee, and transcripts. Applicants must provide	fee, and transcripts. Applicants must provide
documentation of high school or GED	documentation of high school or GED
completion and, if college courses have been	completion and, if college courses have been
attempted, official transcripts demonstrating	attempted, official transcripts demonstrating
a cumulative GPA of 2.0 or higher for all post-	a cumulative GPA of 2.0 or higher for all post-
secondary coursework. Students who later	secondary coursework. Students who later
choose to pursue a bachelor's degree must	choose to pursue a bachelor's degree must
apply for admission as a degree-seeking	apply for admission as a degree-seeking
student.	student.

<ul> <li>Core Courses (9 credit hours)</li> <li>MIS 665 - Business Analytics and Data Mining Credits: 3</li> <li>MIS 670 - Social Media Analytics and Web Mining Credits: 3</li> <li>MKTG 580 - Business Intelligence for Strategic Decision Making Credits: 3</li> </ul>	<ul> <li>Core Courses (9 credit hours)</li> <li>MIS 665 - Business Analytics and Data Mining Credits: 3</li> <li>MIS 670 - Social Media Analytics and Web Mining Credits: 3</li> <li>MKTG 580 - Business Intelligence for Strategic Decision Making Credits: 3</li> </ul>
	Elective Courses
Select 2 of the following six courses:	
<ul> <li>ECON 630 - Introduction to Econometrics Credits: 3</li> <li>FINAN 498 - Problems in Finance Credits: 1- 18</li> <li>MANGT 521 - Quantitative Management Credits: 3</li> <li>MKTG 642 - Marketing Research Credits: 3</li> <li>MKTG 581 - Marketing Analytics Credits: 3</li> <li>MIS 422 - Studio 2: Business Database Systems Credits: 3</li> </ul>	<ul> <li>Select 2 of the following six courses:</li> <li>ECON 630 - Introduction to Econometrics Credits: 3</li> <li>FINAN 623 - Financial Modeling Credits: 3</li> <li>MANGT 521 - Quantitative Management Credits: 3</li> <li>MKTG 642 - Marketing Research Credits: 3</li> <li>MKTG 581 - Marketing Analytics Credits: 3</li> <li>MIS 422 - Studio 2: Business Database Systems Credits: 3</li> </ul>
Total Credit Hours: (15)	Total Credit Hours: (15)

#### Rationale

Change elective in certificate from FINAN 498 Problems in Finance to new course FINAN 623 Financial Modeling.

Impact On Other Units None

Effective Date

Spring 2018

# College of Engineering (4-6-17)

#### **General Engineering**

FROM:

DEN 015 - New Student Orientation Seminar.

Credits: 0

Introduction to the College of Engineering. Emphasis in on new student (Freshmen and transfer) transition to college life. Students. Obtain computer id's, information on college procedures (drop/add, curriculum change, and wait list), and receive guidance on how to become a successful student in the College of Engineering. NSOS has a lecture/small group discussion format and meets only 3-4 times at the beginning of the semester.

Typically offered: Fall and Spring

#### DEN 015 – Engineering Student Success Seminar

#### Credits: 0

Supports engineering students in identifying potential barriers to student success and gaining access to related campus resources. Students will participate in interactive small groups and discussions. This course will also assist students in developing effective academic skills including, but not limited to: time management, organization, learning styles, effective communication, academic planning and goal setting.

#### Note:

<u>One hour per week.</u> <u>Repeatable</u>

#### **Requisites:**

Prerequisite: General Engineering students only. Prerequisite and/or co-requisite: Math 100 or Math 150.

#### Typically offered:

Fall, Spring

Rationale: DEN 015 is being redesigned to accommodate first year engineering students who are academically unprepared to start in a typical first semester of a degree program within the College of Engineering. This course will focus on academic success and equip students with the necessary study skills and awareness to campus resources that will help develop behaviors necessary to be successful in an engineering degree program.

Impact: None outside the College

Effective: Spring 2018

# College of Engineering (4-27-17)

# Non-Expedited COURSE PROPOSALS Courses Numbered 000-599

## Architectural Engineering

From:

ARE 460 – ARE Professional Practice (3) General business, management, and contractual procedures in professional practice. Personal development of skills needed to enter and be accepted in the industry today.

#### Note

3 hours recitation per week.

## Requisites

Prerequisite: Must be taken concurrently with ARE 551, ARE 552, ARE 553, and CE 537.

## Offered

Fall, Spring

**UGE course** No

K-State 8 None

## TO:

ARE 460 – ARE Professional Practice (3) General business, management, and contractual procedures in professional practice. Personal development of skills needed to enter and be accepted in the industry today.

#### Note

3 hours recitation per week.

## Requisites

Prerequisite: Must be taken concurrently with ARE 551, ARE 552, ARE 553, and CE 537.

## Offered

Fall, Spring

#### **UGE course** No

K-State 8

Ethical Reasoning and Responsibility

**Rationale:** This course replaced ARE 539 Architectural Engineering Management in the old 5-year degree plan which carried this K-State 8 tag. The intent was to continue the K-State 8 tag of Ethics Reasoning and Responsibility

in this similar content course. The course touches on ethics in a variety of professional practice areas with specific focus on the code of ethics for engineers published by the National Society of Professional Engineers.

**Effective:** Spring 2018

Impact: None

## **Mechanical Engineering**

From:

## ME 574 - Interdisciplinary Industrial Design Projects I

#### Credits: 3

Introduction to design theory, project management, team dynamics and socio-economic context of design, etc.; application of design principles, engineering analysis and experimental methods to an industrial interdisciplinary design project involving design, analysis, fabrication and testing.

#### Note

#### One hour recitation and six hours lab per week.

#### Requisites

Prerequisite: ME 535 or NE 612, ME 533, ME 571.

Prerequisite or concurrent: ENGL 415, or instructor approval.

**Typically Offered** Fall, Spring

K-State 8 None

To:

**ME 574 - Interdisciplinary Industrial Design Projects I** (3) Introduction to design theory, project management, team dynamics and socio-economic context of design, etc.; application of design principles, engineering analysis and experimental methods to an industrial interdisciplinary design project involving design, analysis, fabrication and testing. Discussion of career planning, graduate school, ethics, technical/professional societies, and engineering licensing.

#### Note

#### Requisites

Prerequisite: ME 535 or NE 612, ME 533, ME 571.

Prerequisite or concurrent: ENGL 415, or instructor approval.

#### **Typically Offered** Fall, Spring

K-State 8 Ethical Reasoning and Responsibility Rationale: Industrial Design projects II has traditionally held the discussion of career planning, graduate school, ethics, technical/professional societies, and engineering licensing, however; this information presented in the student's last semester and is often occurring too late. There also is going to be a restructuring of the class that will allow these topics to seamlessly introduced in the first semester.

MNE would like to remove the note as students are only officially in six hours of "lab" per week. Some of that lab time is used for lecture content.

Since the ethics content is being moved from Industrial Design Projects II to I, the K-State 8 Ethical Reasoning and Responsibility tag should come with it.

Impact: None

Effective: Spring 2018

From:

ME 575 - Interdisciplinary Industrial Design Projects II

#### Credits: 3

Continuation of ME 574 with emphasis on in-depth project experience. Also, discussion of career planning, graduate school, ethics, technical/professional societies, and engineering licensing.

#### Note

One hour lecture and five hours lab a week.

**Requisites** Prerequisite: ME 574 or instructor approval.

Typically Offered Fall, Spring

UGE course No

K-State 8 Ethical Reasoning and Responsibility

To:

#### ME 575 - Interdisciplinary Industrial Design Projects II

Credits: 3

Continuation of ME 574 with emphasis on in-depth project experience.

Note

**Requisites** Prerequisite: ME 574 or instructor approval.

#### Typically Offered

Fall, Spring

**UGE course** No

**K-State 8** None

Rationale: Described in Industrial Design Projects I.

Impact: None

Effective: Spring 2018

# Non-Expedited <u>Undergraduate New Courses</u> <u>Curriculum and Instruction</u>

**#1 EDSEC 548. Technology Education Methods for Secondary and Middle Schools.** (3) Fall. This course addressed the principles of teaching applied to technology education instruction in the secondary and middle schools including motivation, organization of subject matter, lesson/unit planning, assessment and reporting, organization and management of the classroom, and methodology and materials of the secondary and middle schools. This course will also address the technology education curriculum, instructional practices for individual learners and learning, and college and career readiness practices for students. Pre-Requisite: EDSEC 376 and Co-Requisite: EDSEC 477, EDSEC 549.

**IMPACT:** Since this is an education course, only the Department of Curriculum and Instruction will be impacted concerning staffing and scheduling the course.

The new teaching field in technology education was jointly prepared by the Department of Engineering Technology in the Kansas State Polytechnic and faculty from the College of Education. Most of the required courses in the new teaching field will be taught through the Kansas State Polytechnic. Any course in the program with an ED prefix will be staffed and scheduled by the College of Education. This program has the full support of Dean Verna Fitzsimmons in the Kansas State Polytechnic and Dean Debbie Mercer in the College of Education as evidenced in their communications in December 2015.

**RATIONALE:** This is a new course which is one of the requirements in a new secondary education teaching field in technology education. This new teaching field is designed to provide more technology education teachers in the state, and there currently is a shortage of those teachers. Many of the required courses in the program currently exist, but this is a new course designed to address teaching methods specifically appropriate for instruction in technology education.

# **EFFECTIVE DATE:** Spring 2018

**#2 EDSEC 549. Technology Education Practicum for Secondary and Middle Schools.** (2) Fall. This field-based experience provides the opportunity for students to plan, teach, and evaluate technology education lessons within a placement at the middle or secondary level. This practicum also requires students to incorporate reading methods and apply instructional technology in their instruction. Pre-Requisite: EDSEC 376 and Co-Requisite: EDSEC 477, EDSEC 548.

**IMPACT:** Since this is an education course, only the Department of Curriculum and Instruction will be impacted concerning staffing and scheduling the course.

The new teaching field in technology education was jointly prepared by the Department of Engineering Technology in the Kansas State Polytechnic and faculty from the College of Education. Most of the required courses in the new teaching field will be taught through the Kansas State Polytechnic. Any course in the program with an ED prefix will be staffed and scheduled by the College of Education. This program has the full support of Dean Verna Fitzsimmons in the Kansas State Polytechnic and Dean Debbie Mercer in the College of Education as evidenced in their communications in December 2015.

**RATIONALE:** This is a new course which is one of the requirements in a new secondary education teaching field in technology education. This new teaching field is designed to provide more technology education teachers in the state, and there currently is a shortage of those teachers. Many of the required courses in the program currently exist, but this is a new course providing a field-based opportunity to practice the teaching methods specifically appropriate for instruction in technology education.

# **EFFECTIVE DATE:** Spring 2018

# <u>Non-Expedited</u> <u>Undergraduate Program Changes</u> <u>Curriculum and Instruction</u>

# #1 Secondary Education Program - Bachelor's Degree Requirement Changes for New Teaching Field in Technology Education

FROM:	ТО:
Minimum of 126 credit hours required	Minimum of 126 credit hours required
Licensure 6-12	Licensure 6-12
Bachelor's degree requirements	Bachelor's degree requirements
<b>General Education requirements</b> (33 credit hours minimum)	General Education requirements (33 credit hours minimum)
Communications (8-9 credit hours)	Communications (8-9 credit hours)
(A grade of C or better is required)	(A grade of C or better is required)
COMM 105 – Public Speaking IA Credits: (2)	COMM 105 – Public Speaking IA Credits: (2)
Or	Or
COMM 106 – Public Speaking I Credits: (3)	COMM 106 – Public Speaking I Credits: (3)
Or	Or
COMM 109 – Public Speaking 1A, Honors Credits: (3)	COMM 109 – Public Speaking 1A, Honors Credits: (3)
ENGL 100 – Expository Writing 1 Credits: (3)	ENGL 100 – Expository Writing 1 Credits: (3)
ENGL 200 Expository Writing II Credits: (3)	ENGL 200 Expository Writing II Credits: (3)
Humanities (6 credit hours)	Humanities (6 credit hours)
Literature	Literature
Any department of English literature or Department of	Any department of English literature or Department of
Modern Langugages literature course Credits: (3)	Modern Languages literature course Credits: (3)
Fine arts appreciation	Fine arts appreciation
Any nonperformance appreciation class in the	Any nonperformance appreciation class in the
Department of Art, Architecture, Modern Languages or	Department of Art, Architecture, Modern Languages or
School of Music, Theatre and Dance Credits: (3)	School of Music, Theatre and Dance Credits: (3)
Social Science (6 credit hours)	Social Science (6 credit hours)
Elective from Departments of AMETH,	Elective from Departments of AMETH,
ANTH, ECON, GEOG, HIST, POLSC,	ANTH, ECON, GEOG, HIST, POLSC,
PSYCH, SOCIO, WOMST Credits: (3)	PSYCH, SOCIO, WOMST Credits: (3)
Global Issues and Perspective course (tagged	Global Issues and Perspective course (tagged
as meeting the K-State 8 requirements) from	as meeting the K-State 8 requirements) from
Departments of AMETH, ANTH, ECON,	Departments of AMETH, ANTH, ECON,

GEOG, HIST, POLSC, PSYCH, SOCIO,	
WOMST Credits:(3)	

**Natural Science** (7 credit hours) One lab required.

Quantitative sciences (6 credit hours) MATH 100 – College Algebra Credits (3) (or higher level math course) (Grade of C or better) STAT 325 – Introduction to Statistics Credit (3)

**Teacher Education Courses** (40 credit hours) A grade of C or higher is required in all Teacher Education courses and practica. A 3.0 or higher grade point average in Teacher Education courses and practica is needed before the Professional Semester.

**Pre-Professional Component** (8 Credit hours) DED 075 - Orientation to Teacher Education at KSU Credits: (0) EDSEC 200 - Teaching as a Career Credits: (1) EDSEC 230 - Early Field Experience Credits: (1) EDSEC 310 - Foundations of Education Credits: (3) FSHS 110 - Introduction to Human Development Credits: (3)

**Professional Component** (32 credit hours) Admission to teacher education required.

Non-blocked courses (Must be completed before student teaching) DED 318 - Educational Technology for Teaching and Learning Credits: (1) (Must be completed before Block II) EDSEC 405 - Middle-Level Education Credits: (2) (Not required for K-12 majors in art, modern languages, music, or physical education/health.)

Students receiving a grade of less than C in a Block 1 course will not be permitted to proceed to Block 2 until a grade of C or higher is recorded (i.e., must retake the Block 1 course first).

Block 1 (8 credit hours)
Courses must be taken concurrently and prior to Block II.
EDCEP 315 - Educational Psychology Credits: (3)
EDSEC 376 - Core Teaching Skills:
Secondary/Middle Credits: (3)
EDSP 323 - Exceptional Students in the Secondary
School Credits: (2)
Block II (9 credit hours)
Courses must be taken concurrently and prior to Student Teaching.

EDCEP 525 - Interpersonal Relations in the Schools Credits: (1) EDSEC 455 - Teaching in a Multicultural Society Credits: (1)

# GEOG, HIST, POLSC, PSYCH, SOCIO, WOMST Credits:(3)

**Natural Science** (7 credit hours) One lab required.

**Quantitative sciences** (6 credit hours) MATH 100 – College Algebra Credits (3) (or higher level math course) (Grade of C or better) STAT 325 – Introduction to Statistics Credit (3)

**Teacher Education Courses** (40 credit hours) A grade of C or higher is required in all Teacher Education courses and practica. A 3.0 or higher grade point average in Teacher Education courses and practica is needed before the Professional Semester.

**Pre-Professional Component** (8 Credit hours) DED 075 - Orientation to Teacher Education at KSU Credits: (0) EDSEC 200 - Teaching as a Career Credits: (1) EDSEC 230 - Early Field Experience Credits: (1) EDSEC 310 - Foundations of Education Credits: (3) FSHS 110 - Introduction to Human Development Credits: (3)

**Professional Component** (32 credit hours) Admission to teacher education required.

Non-blocked courses (Must be completed before student teaching) DED 318 - Educational Technology for Teaching and Learning Credits: (1) (Must be completed before Block II) EDSEC 405 - Middle-Level Education Credits: (2) (Not required for K-12 majors in art, modern languages, music, or physical education/health.)

Students receiving a grade of less than C in a Block 1 course will not be permitted to proceed to Block 2 until a grade of C or higher is recorded (i.e., must retake the Block 1 course first).

**Block 1** (8 credit hours) Courses must be taken concurrently and prior to Block II. EDCEP 315 - Educational Psychology Credits: (3) EDSEC 376 - Core Teaching Skills: Secondary/Middle Credits: (3) EDSP 323 - Exceptional Students in the Secondary School Credits: (2)

**Block II** (9 credit hours) Courses must be taken concurrently and prior to Student Teaching. EDCEP 525 - Interpersonal Relations in the Schools Credits: (1) EDSEC 455 - Teaching in a Multicultural Society Credits: (1)

EDSEC 477 - Content Area Literacies and Diverse	EDSEC 477 - Content Area Literacies and Diverse
Learners Credits: (2)	Learners Credits: (2)
Choose one of the following that corresponds to your teaching field:	Choose one of the following that corresponds to your teaching field:
EDSEC 530 - Art Methods for Secondary and Middle Schools Credits: (3) EDSEC 532 - Business Methods for Secondary and Middle Schools Credits: (3) EDSEC 534 - Family and Consumer Science Methods for Secondary and Middle Schools Credits: (3) EDSEC 536 - Language Arts Methods for Secondary and Middle Schools Credits: (3) EDSEC 538 - Mathematics Methods for Secondary and Middle Schools Credits: (3) EDSEC 540 - Modern Language Methods for Secondary and Middle Schools Credits: (3) EDSEC 542 - Science Methods for Secondary and Middle Schools Credits: (3) EDSEC 544 - Social Studies Methods for Secondary and Middle Schools Credits: (3) EDSEC 546 – Physical Education/Health Methods for Secondary and Middle Schools Credits: (3)	EDSEC 530 - Art Methods for Secondary and Middle Schools Credits: (3) EDSEC 532 - Business Methods for Secondary and Middle Schools Credits: (3) EDSEC 534 - Family and Consumer Science Methods for Secondary and Middle Schools Credits: (3) EDSEC 536 - Language Arts Methods for Secondary and Middle Schools Credits: (3) EDSEC 538 - Mathematics Methods for Secondary and Middle Schools Credits: (3) EDSEC 540 - Modern Language Methods for Secondary and Middle Schools Credits: (3) EDSEC 542 - Science Methods for Secondary and Middle Schools Credits: (3) EDSEC 542 - Science Methods for Secondary and Middle Schools Credits: (3) EDSEC 544 - Social Studies Methods for Secondary and Middle Schools Credits: (3) EDSEC 546 – Physical Education/Health Methods for Secondary and Middle Schools Credits: (3) EDSEC 548 – Technology Education Methods for Secondary and Middle Schools Credits: (3)
Choose one of the following that corresponds to your	Choose one of the following that corresponds to your
teaching field:	teaching field:
EDSEC 531 - Art Methods Practicum Credits: (2)	EDSEC 531 - Art Methods Practicum Credits: (2)
EDSEC 533 - Business Methods Practicum Credits: (2)	EDSEC 533 - Business Methods Practicum Credits: (2)
EDSEC 535 - Family and Consumer Science Methods	EDSEC 535 - Family and Consumer Science Methods
Practicum Credits: (2)	Practicum Credits: (2)
EDSEC 537 - Language Arts Methods	EDSEC 537 - Language Arts Methods
Practicum Credits: (2)	Practicum Credits: (2)
EDSEC 539 - Mathematics Methods	EDSEC 539 - Mathematics Methods
Practicum Credits: (2)	Practicum Credits: (2)
EDSEC 541 - Modern Language Methods	EDSEC 541 - Modern Language Methods
Practicum Credits: (2)	Practicum Credits: (2)
EDSEC 543 - Science Methods Practicum Credits: (2)	EDSEC 543 - Science Methods Practicum Credits: (2)
EDSEC 545 - Social Studies Methods	EDSEC 545 - Social Studies Methods
Practicum Credits: (2)	Practicum Credits: (2)
EDSEC 547 - Physical Education/Health Practicum for	EDSEC 545 - Physical Education/Health Practicum for
Secondary and Middle Schools Credits: (2)	Secondary and Middle Schools Credits: (2)
<b>Professional Semester</b> (12 credit hours)	<b>Professional Semester</b> (12 credit hours)
A 3.0 or higher grade point average in Teacher	A 3.0 or higher grade point average in Teacher
Education courses and practica is needed before the	Education courses and practica is needed before the
Professional Semester	Professional Semester
EDSEC 586 - Teaching Internship in Secondary	EDSEC 586 - Teaching Internship in Secondary
Schools Credits: (Variable 1-12)	Schools Credits: (Variable 1-12)
Internship requirements may vary by teaching field.	Internship requirements may vary by teaching field. The
The following courses may also be used to complete	following courses may also be used to complete the 12
the 12 credit minimum.	credit minimum.
EDSEC 582 – Teaching Internship in Music (variable	EDSEC 582 – Teaching Internship in Music (variable 6-
6- 12)	12)

EDEL 585 – Teaching Internship in Elementary	EDEL 585 – Teaching Internship in Elementary Schools
Schools (variable 1- 15)	(variable 1- 15)
<b>Teaching Field</b> (One of the following areas must be	<b>Teaching Field</b> (One of the following areas must be
selected)	reaching Field (One of the following areas must be
	selected)
Art (47 credits)	Art (47 credits)
Biology (68-69 credits)	Biology (68-69 credits)
Business (55 credits)	Business (55 credits)
Chemistry (58 credits)	Chemistry (58 credits)
Earth and Space Science (64 credits)	Earth and Space Science (64 credits)
English (39 credits)	English (39 credits)
English and Journalism (48 credits)	English and Journalism (48 credits)
Journalism (33 credits)	Journalism (33 credits)
Mathematics (40 credits)	Mathematics (40 credits)
Modern Languages (34-36 credits)	Modern Languages (34-36 credits)
Physical Education and Health (53 credits)	Physical Education and Health (53 credits)
Physics (65 credits)	Physics (65 credits)
Speech and Theatre (42 credits)	Speech and Theatre (42 credits)
Social Studies (64 credits)	Social Studies (64 credits)
	Technology Education (67 credits)
Total hours required for graduation (126)	Total hours required for graduation (126)
`	roun nours requires for graduation (120)

**IMPACT:** This proposal impacts the Department of Engineering Technology in the Kansas State Polytechnic since most of the courses in the proposed teaching field are offered through that department. The preparation of this program has the full support of Dean Verna Fitzsimmons in the Kansas State Polytechnic and Dean Debbie Mercer in the College of Education as evidenced in their communications in December 2015.

With the support of Dean Verna Fitzsimmons, several faculty members of that department participated in the creation of this new teaching field during spring 2016, and they are prepared to offer the required courses in the program. Assistant Dean Alysia Starkey led the discussions as the program was developed. The process included at least six member of the Department of Engineering Technology. Two members of the College of Education also participated in the program's development—Dr. Sally Yahnke and Assistant Dean Paul Burden.

**RATIONALE:** This is a proposal to add one more teaching field as a choice in the secondary education program. The new teaching field is in the area of Technology Education. According to the Kansas State Department of Education, there is a definite need for more technology education teachers at the secondary level, and the College of Education is seeking to fulfill this need with this new teaching field in the secondary education program.

**EFFECTIVE DATE:** Spring 2018

# #2 Secondary Education Program: Technology Education - New Teaching Field

FROM:	TO:
This is a new teaching field.	<b>Technology Education Licensure Program</b> (67 credit hours)
	CMST 103 Computing Principles (3)

CMST 250 Hardware and Network Fundamentals (3)
CMST 252 System and Software Fundamentals (3)
ECET 100 Basic Electronics (4)
ECET 250 Digital Logic (4)
ECET 304 Electric Power and Devices (3)
MET 111 Technical Graphics (3)
MET 121 Manufacturing Methods (3)
MET 211 Statics (3)
MET 225 Additive Manufacturing (3)
MET 230 Automated Manufacturing Systems I (3)
MET 231 Physical Materials and Metallurgy (3)
MET 252 Fluid Power Technology (3)
MET 264 Machine Design Technology I (4)
ETA 292 Problems in Engineering Technology (3)
ETB 492 Advanced Problems in Engineering
Technology (3) (Special Topics-Energy Systems and
Construction Technology)
MATH 150 Plane Trigonometry (3)
CHM 110 General Chemistry (3)
PHYS 113 General Physics I (4)
EDSEC 620 Principles and Philosophy of Career and
Technical Education (3)
EDSEC 621 Program Planning in Career and Technical
Education (3)
Total: 67 credits

**IMPACT:** This proposal impacts the Department of Engineering Technology in the Kansas State Polytechnic since most of the courses in the proposed teaching field are offered through that department. The preparation of this program has the full support of Dean Verna Fitzsimmons in the Kansas State Polytechnic and Dean Debbie Mercer in the College of Education as evidenced in their communications in December 2015.

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**RATIONALE:** This is a proposal to add one more teaching field as a choice in the secondary education program. The new teaching field is in the area of Technology Education. According to the Kansas State Department of Education, there is a definite need for more technology education teachers at the secondary level, and the College of Education is seeking to fulfill this need with this new teaching field in the secondary education program.

# **EFFECTIVE DATE:** Spring 2018

# Graduate course and curriculum changes (5-2-17)

#### Non-Expedited New Courses

# AGEC 751, Risk Management Fellows Seminar Credits (1)

This course serves as The Center for Risk Management Education and Research Student Fellows seminar course. Students will conduct a risk management research project.

#### When Offered: Fall, Spring, Summer

Prerequisite: Junior standing, admitted to the Risk Management Fellows Program, and consent of the instructor.

#### **Repeatable Course**

**Rationale:** For several semesters now, Center for Risk Management Education and Research Student Fellows have been enrolling in the course AGEC 750 Agricultural Economics and Agribusiness Problems as their seminar course. The Student Fellows are from various academic disciplines at K-State, and this is a multi-disciplinary program led by the Department and Agricultural Economics with the Departments of Finance and Industrial and Manufacturing Systems Engineering. Given the growth in the program and for clarity for students, faculty, and staff, it is appropriate for this course to now have its own permanent number.

Impact: No impact on other departments.

Effective Term: Spring 2018

# ENTOM 810, Insect Pest Management Credits (3)

The theory and practice of Integrated Pest Management (IPM) with an emphasis on pests in agricultural systems. Integrated concepts include but are not limited to economic thresholds, sampling plans, plant resistance to insects, biological control, pesticides and resistance management. Case studies from several row-crop systems are used to explore key concepts.

When Offered: Spring, Even Years

Prerequisite: ENTOM 300 or ENTOM 312 or consent of the instructor.

**Rationale:** This course will provide students with enhanced curriculum to acquire strong quantitative reasoning and analytical skills in the area of Integrated Pest Management. Course content will follow a "theory-then-practice" delivery structure. One week will be structured as a discussion around a key topic area within IPM (e.g., biological control, host plant resistance, sampling method and design, etc.) and the following week will include practice or "hands-on" exercises associated with the topic area (e.g., experimental design, statistical analyses, data computation, etc.). Content will include IPM examples from outside of entomology (e.g., plant pathology, weeds, cropping systems or integrated crop management, horticulture) based on student interest. This format could draw students from other departments (e.g., agronomy, plant pathology, horticulture, grain science, agricultural economics).

Impact: No impact beyond the College of Agriculture.

**EDSP 615. Manual Communications II**. (3) Offered Based on Need. This course is a continuation in the instruction of American Sign Language. This will include approximately 400 additional signs. There will be further discussion about the grammar and syntax of American Sign Language. Research will be conducted in the use of various manual communication systems with special populations, including aphasic, developmentally disabled, and others. Pre-Requisite: Manual Communications I or equivalent.

**IMPACT:** Presented below is an email reply to a request to Dr. Dorothy Durband, Director of the School of Family Studies and Human Services, for an email supporting the transfer of the course from FSHS to SECSA. The email request and reply were dated 1/7/15.

Ken,

The purpose of this email is to let you know that I am in support of moving Manual Communications 1 and 2 to Special Education, Counseling, and Students Affairs. I sincerely hope that the courses will be beneficial to your students. Best wishes in 2015!

Dottie

Dorothy B. Durband, Ph.D. Director School of Family Studies and Human Services College of Human Ecology Kansas State University 302 Justin Hall 785.532.1472

**RATIONALE:** Manual Communications II, offered through Global Campus, has been offered by Family Studies and Human Services (FSHS) in the College of Human Ecology. It is proposed to be transferred as a new course to Special Education, Counseling, and Student Affairs (SECSA) in the College of Education. Family Studies and Human Services decided it would no longer offer the course. Based on discussions with SECSA, it was agreed that the course would fit with Special Education.

## **EFFECTIVE DATE:** Spring 2018

**EDCEP 839. Assessment of Academic Advising**. (3) Semesters vary based on need. The role of quality academic advising is key to student success, graduation, and completion as identified in the research and literature on the undergraduate student experience. However, the quality and the effectiveness of the academic advising experiences must be assessed. This course will focus on a review of the foundations of academic advising, the key terms and processes of assessment, and the strategies and processes used to assess academic advising. **IMPACT:** None.

**RATIONALE:** This course is planned to be offered as a restricted elective in the MS in Academic Advising. The content provides a relevant option for the profession of academic advising.

EFFECTIVE DATE: Spring 2018

#### Mathematics

ADD: MATH 723 – Complex Functions. (3) II. Introduction to the theory of analytic functions, designed to prepare students for the qualifying exams. Holomorphic functions, contour integrals, residue theory, conformal mapping and other topics. 3 hours lecture each week. Pr.: MATH 721 is recommended. K-State 8: None.

RATIONALE: We are adding a course in complex functions at the 700-level to help prepare our graduate students for their exams.

IMPACT: No impact on other units.

EFFECTIVE DATE: Spring 2018

#### Sociology, Anthropology, and Social Work

- ADD: SOCIO 838 Sociology of Culture. (3) I. Intensive reading and discussion of classical and contemporary works relating to the study of culture, all those things that render the world around us comprehensible, communicable, and meaningful. The Focus on collective meaning, the process through which meaning is generated, and the roles collective meanings play in social life.
- RATIONALE: Over the past two or three decades, the sociological interest in culture has increased dramatically. Tremendous advances have since been made in this field; culture is now a major area of specialization within sociology and attention to culture now plays a significant role in most sub-fields of sociology has started to impact the discipline as a whole. This course seeks to recognize this impact and make the sociological study of culture assessable to our graduate students.

IMPACT: This course should not affect other units.

EFFECTIVE DATE: Spring 2018

#### Statistics

- ADD: STAT 750 Studies in Probability and Statistics. (1-4) On demand. Studies of topics in probability, statistics, experimental design, stochastic processes, or other topics. May be repeated. Pr.: Instructor consent. K-State 8: None.
- RATIONALE: This will be a general topics course to change each semester it is offered depending on faculty and student interests. This course will mirror the structure of Stat 950 except to be accessible to upper level undergraduate students and graduate students. As the statistics field evolves and new faculty join the program, a general variable credit and graded topics course is desired for the purpose of educating students on emerging areas or to pilot ideas for new courses for the standard curriculum. The Stat 950 topics are generally out of reach for most MS students and all undergraduate students. Stat 799 is a credit/no credit course and often taken by students completing summer internships off campus as part of I-20 requirements. This course. Stat 750, will be graded and does not overlap with other existing courses.
- IMPACT: No other units are affected. It may be that another program wants to allow this course as an elective for a major(s).

EFFECTIVE DATE: Spring 2018

#### **Biological & Agricultural Engineering**

ADD: BAE 675. Molecular Biosensor Technology and Applications. (3) Basic concepts of proteins, DNAs and cell technologies, which are needed for biosensor design, fabrication, application and future aspects. Emphasis on laboratory assays, engineering fabrication methods, and principles applied in biosensor development for animal and human disease diagnosis. Requisites: Pre-Req or Co-Req: BAE 445

Typically Offered: Fall

**Rationale**: This course has been offered as a special topics/problems course for the past two years. There were 14 students from 5 departments enrolled in this class fall semester 2016, making a total of 36 students enrolled for the past two years. This course will support the biological option of the BSE undergraduate program and other undergraduate students interested in Bioengineering. This course will cover different aspects of biotechnology and particularly focus on topics and concepts in biosensors fabrication and engineering principles associated with animal and human health problems.

Impact: Communicated with other departments (ECE, ChemE, and Chem) and no impacts have been identified

Effective: Spring 2018

ADD: BAE 875. Advanced Molecular Biosensor Technology and Applications. (3) Advanced research and study of bioengineering laboratory assays, engineering fabrication methods, and principles applied in biosensor development for animal and human disease diagnosis. Requisites: Pre-Req: BAE 445 Not available for students with credit for BAE 675.

Typically Offered: Fall

Rationale: This new course will support the graduate program in BAE in the biological engineering area.

Impact: Communicated with other departments (ECE, ChemE, and Chem) and no impact have been identified.

Effective: Spring 2018

#### Industrial Engineering

#### ADD:

IMSE 808. <u>Systems Engineering Fundamentals</u>. (3)Systems engineering is an interdisciplinary engineering management process used to develop an integrated, life-cycle balanced set of system solutions that satisfy customer needs. This course provides the fundamentals of a systems engineering approach to solving complex engineering systems problems. This course will address systems engineering processes and tools as they relate to the development and life cycle management of complex systems. Topics included in the course are analyzing customer's needs, requirements development, systems design, development and integration, developing technical performance measures, system verification and managing cost, schedule, and risk in engineering tasks. This course will also introduce reliability, availability and maintainability concepts and their applicability with complex systems. This course is applicable to all engineering disciplines involved with complex engineering systems. Requisites: 9 graduate credits from any engineering discipline, B.S. Engineering or Computer Science degree.

#### Typically Offered: on sufficient demand

**Rationale**: Systems engineering is an interdisciplinary approach and means to enable the realization of successful, complex systems. It focuses on defining customer needs and required functionality early in the development cycle, documenting requirements, then proceeding with design synthesis and system validation while considering the complete problem. As the complexity of systems increase, the systems engineering discipline provides methods and strategies for handling system complexity. The fundamental principles of systems engineering have an important role in the education of all engineers, regardless of their specialty, as well as professionals who work in the systems engineering field. The Industrial and Manufacturing Systems Engineering department believes that this course would enhance the course offerings in their Industrial Engineering, Operations Research and Engineering Management graduate programs.

Impact: No impact.

#### Mechanical Engineering

ADD: NE 640. Nuclear Reactor Thermalhydraulics. Engineering principles underlying the design and operation of nuclear power plant components and systems. Fundamentals of nuclear energy generation, heat transport, and single- and two-phase flows.

Credits: 3

Note:

Requisites: NE 495, and Co-Req: ME 573

Typically Offered: Spring

UGE Course: No

K-State 8: No

**Rationale:** The typical curriculum of Nuclear Engineering education comprises of: a) Nuclear Reactor Systems and b) Radiation and Health Physics. Fundamentals of Nuclear Reactor Systems comprise of Reactor Thermalhydraulics and Reactor Physics. There is already a course in the catalog to cover Reactor Physics (NE-630) which is offered in Fall semester, but there is no course to cover Reactor Thermalhydraulics principles. In every Nuclear Engineering undergraduate program, nuclear option or minor program in United States, Nuclear Reactor Thermalhydraulics is either a compulsory course or technical elective. During the last three Spring semesters, this course has been offered as a special topics course, and has been able to attract undergraduate students.

**Impact:** There are at least two faculty members, ten graduate students and fifteen undergraduate students in Department of Mechanical and Nuclear Engineering, who are pursuing research related to thermal behavior of Nuclear Reactors. These research projects are sponsored by Department of Energy and Nuclear Regulatory Commission. Therefore, there is a justified need of enhancing educational program to improve the capabilities of the students involved in related research.

Most of the Nuclear Engineering jobs in United States or other countries are in the Nuclear Energy Systems. The students can greatly benefit from this course which is closely connected to design and operation of Nuclear Energy Systems. Department Head was contacted in Spring 2016, and he was enthusiastic about this course. It is not known if it impacts other unit.

Effective: Spring 2018

#### FINAN 623 – Financial Modeling

Credits: (3)

This course is designed to provide an in-depth knowledge of the use of Excel for use in the corporate finance and equity valuation environment. Topics include: • Use of Excel •Developing Models in Excel • Developing functional understanding of how to use Excel.

#### Requisites

Pre-requisites: FINAN 510 and FINAN 520 or FINAN 830

When Offered

Fall, Spring

#### Rationale

Our Finance Advisory Board members have indicated that our students are in need of application skills, especially in Excel, as they transition to the workplace. This course offers the student an in-depth functionality of Microsoft's Excel

as well as a chance to apply the theoretical finance knowledge gained in prior classes. We have piloted this course for several semesters as a special topics course and the response to the class from both students and employers has been very positive.

#### **Effective Date**

Spring 2018

## Non-Expedited Courses Changes

AGRON 655, Site Specific Agriculture	AGRON 655, Site Specific Agriculture
Credits (3)	Credits (3)
Introduction to spatial analysis and management of agricultural and environmental resources using Geographic Information Systems (GIS) technology. Emphasis on collecting, displaying, and analyzing spatial or georeferenced soil, crop, or other land surface data. Two hours lecture, two hours lab, and one hour by appointment per week. When Offered: Spring	Introduction to spatial analysis and management of agricultural and environmental resources using Geographic Information Systems (GIS) technology. Emphasis on collecting, displaying, and analyzing spatial or georeferenced soil, crop, or other land surface data. Two hours lecture, two hours lab, and one hour by appointment per week. When Offered: Spring
Recommended prerequisite: AGRON 220 and 305 and GEOG 508.	Recommended prerequisite: AGRON <del>220 and 305</del> <u>375</u> and GEOG 508 <u>and GEOG 605</u> . <u>Required prerequisite: AGRON 202</u>

**Rationale:** AGRON 202, Introduction to Precision Ag Software, is a new course that concerns the use of software products used in precision agriculture. Students should understand this software before taking AGRON 655. The recommended prerequisite list has been updated to reflect the current content of the course.

**Impact**: No concerns regarding impacts were expressed at the College of Agriculture Course and Curriculum Committee meeting on March 10, 2017. The Director of the NRES Secondary Major and the Director of the Geographic Information Science Certificate, Shawn Hutchinson, supported the proposed changes in an e-mail message of March 3, 2017. Joe Harner, Department Head of Biological and Agricultural Engineering and the Directors of the Biobased Products and Bioenergy Graduate Certificate, supported the proposed changes in e-mail messages of March 3 and 13, 2017.

AGRON 746, Physical Properties of Soils Credits (3)	AGRON 746, <del>Physical Properties of Soils</del> Environmental Soil Physics
The properties of soils as affected by their	Credits (3)
physical environment, including water content,	The properties of soils as affected by their
water potential, temperature, aeration,	physical environment, including water content,
flocculation-dispersion, and soil compaction.	water potential, temperature, aeration,
Three hours of recitation a week.	flocculation-dispersion, and soil compaction. A
	conceptual and quantitative introductory study of
When Offered: Spring	vadose zone soil physical properties and
	processes in relation to the main components of

Recommended Prerequisite: AGRON 305.	the hydrologic cycle and the soil surface energy balance. Three hours of recitation a week.
	When Offered: Spring
	Recommended Prerequisite: AGRON 305 <u>and</u> PHYS 113.

**Rationale:** The new title better reflects the content of the course, matches the title of the textbook, and is more parallel with the course title of AGRON 605, Soil and Environmental Chemistry. The new course description better describes the scope of the course. The course is now taught by a new instructor who has updated the course to include additional content in soil physics covered on the Soil Science Fundamentals Exam required for certification as a Professional Soil Scientist by the Soil Science Society of America.

**Impact**: No concerns regarding impacts were expressed at the College of Agriculture Course and Curriculum Committee meeting on March 10, 2017. The Director of the NRES Secondary Major (Shawn Hutchinson via e-mail on 3-3-17) and the departments of Biological and Agricultural Engineering and the Biobased Products and Bioenergy Graduate Certificate (Joe Harner via e-mail on 3-3-17), Chemical Engineering (Jim Edgar via e-mail on 3-3-17), Civil Engineering and Geoenvironmental Engineering Design (David Steward via e-mail on 3-3-17), and the Director of the Air Quality Graduate Certificate (Mo Hosni via e-mail on 3-3-17) were contacted, and all support the proposed changes.

#### Effective Term: Spring 2018

ENTOM 930, <b>Topics in Environmental and</b> <b>Physiological Entomology</b>	ENTOM 930, <b>Topics in <del>Environmental and</del> Physiological Entomology</b>
Credits: 1-18	Credits: <del>1-18</del> <u>1-9</u>
Selected topics for advanced study in insect behavior, biomechanics ecology, genetics, physiology, and related areas.	Selected topics for advanced study in insect behavior, biomechanics ecology, genetics, physiology, and related areas. entomology. Repeatable
Requisites:	Requisites:
Prerequisite: Consent of instructor.	Prerequisite: Consent of instructor.
<b>Typically Offered</b> Fall, Spring	<b>Typically Offered</b> Fall, Spring

**Rationale:** Originally ENTOM 930 was intended for special topics in selected areas of environmental and physiological entomology. This course complemented ENTOM 932, which covered general and systematic entomology. We request broadening the scope of ENTOM 930 to cover all topics because we are requesting a concurrent change in the title and description of ENTOM 932 to make it exclusively a teaching experience course.

**Impact**: This course may be used by the Genetics program if/when topics related to genetics are offered. However, the broader course title we propose will continue to allow relevant topics to be offered to this program. Dr. Chris Toomajian has been made aware of this change, and approves (see attached file of our email correspondence in curriculog).

	-
ENTOM 932 - Topics in General and	ENTOM 932 - <del>Topics in General and</del>
Systematic Entomology	Systematic <u>Teaching Experience in</u>
Credits: 1-18	Credits: 1-181-3         Principles of taxonomy; advanced taxonomy;
Principles of taxonomy; advanced taxonomy;	taxonomy of immature insects; acarology;
taxonomy of immature insects; acarology;	biological literature; and teaching experience.         Teaching experiences for graduate students,
biological literature; and teaching experience.	including classroom instruction, development of
Requisites:	curriculum materials, and other pedagogical
Prerequisite: ENTOM 710 and consent of	methods.         Requisites:
instructor.	Prerequisite: ENTOM 710 and Consent of
Typically Offered	instructor.         Typically Offered
Fall, Spring, on sufficient demand	Fall, Spring, on sufficient demand

**Rationale:** Originally ENTOM 932 was intended for special topics in general and systematic entomology, including teaching experience. This course complemented ENTOM 930, which covered environmental and physiological entomology. However, we are submitting a proposal for ENTOM 930 concurrent with this one to broaden its scope to cover all special topics in entomology. We wish to change ENTOM 932 to cover only teaching experience. Because this course is only for entomology graduate students, there is no impact on any other department or college.

## Impact: None

PLPTH 780 - Gene Expression Analysis	PLPTH 780885 - Gene Expression Analysis
Workshop	Introduction to Genomic Technologies
	Workshop
Credits: 1	
	Credits: 4 <u>2</u>
One-week lecture and laboratory on RNA isolation	One-week lecture and laboratory on RNA isolation
and handling, cDNA preparation, microarray and	and handling, cDNA preparation, microarray and
sequence based gene expression analysis.	sequence based gene expression analysis.
Requisites:	Lecture and laboratory on the modern techniques
Recommended Prerequisite: One of the following	to study genes and genomes.
courses: PLPTH 610, AGRON 610, BIOCH 521,	
BIOCH 522, BIOL 675, BIOL 676.	<u>Repeatable</u>
	Requisites:
Typically Offered	Recommended Prerequisite: One of the following
Summer, Intersession	courses: PLPTH 610, AGRON 610, BIOCH 521,
	BIOCH 522, BIOL 675, BIOL 676, <u>PLPTH 680,</u>
	<u>AGRON 680.</u>
	Typically Offered
	Summer <del>, Intersession</del>

**Rationale:** The enrollment in the course has been graduate students, so an increase in the course number from 780 to 885 reflects this student population. The increase in credit hours from 1 to 2 better reflects the mix of lecture and lab contact time. Also, a more general course description will allow the instructor to focus on rapidly changing technologies.

**Impact**: The Undergraduate Minor in Applied Genomics and Biotech was previously eliminated and is no longer offered.

These courses are currently listed as electives for the Graduate Certificate in Genetics and Genomics. The faculty involved with this Certificate Program will be proposing changes to the certificate requirements in Fall 2017.

Effective Term: Spring 2018

WOEM 620 - Human-Wildlife Conflicts	WOEM 620 - Human-Wildlife Conflicts
Credits: 4	Credits: 4
This course explores the theory and practice of assessing and controlling damage done by wild and feral vertebrate animals, especially mammals and birds. Content covers the philosophical, biological, and practical basis for conducting vertebrate pest control. It includes basic information on use of traps, toxicants, repellents, exclusion and other wildlife control methods. Emphasis is on protecting agricultural crops and livestock, forest resources, and property. <b>Typically Offered</b> Spring	This course explores the theory and practice of assessing and controlling damage done by wild and feral vertebrate animals, especially mammals and birds. Content covers the philosophical, biological, and practical basis for conducting vertebrate pest control. It includes basic information on use of traps, toxicants, repellents, exclusion and other wildlife control methods. Emphasis is on protecting agricultural crops and livestock, forest resources, and property. <u>Prerequisite: BIOL 433</u>
	Typically Offered Spring

**Rationale:** It will provide prerequisite knowledge about wildlife conservation necessary for the class. Dr. Davis has contacted Dave Rintoul of the Biology Department regarding this prerequisite. There is no other impact outside this department and will not affect current enrollment in BIOL 433.

Impact: No report for undergraduate or graduate catalog

Effective Term: Fall 2018

#### Non-Expedited Course Drop

**ENTOM 866 - Insect Morphology**, Credits: **3**, Morphology of insects with emphasis on the evolution and functional complexes of structures. Anatomy and structure of internal systems using microdissections and histological techniques.

Note:

Two one hours lecture, one three hour lab per week.

**Requisites:** 

Prerequisite: ENTOM 312 and ENTOM 313 or ENTOM 710.

**Rationale:** ENTOM 866 has had no enrollment for several years and it is unlikely that our graduate students or others will enroll in the future. In addition, some of the subject matter is covered in currently-offered courses, including ENTOM 710 and ENTOM 875.

**Impact**: No impact likely. There has been no enrollment in ENTOM 866 for many years. Furthermore, the rationale for our own graduate students is that they can obtain some of the course content by enrolling in other courses that will continue to be offered. This option is also available to students in other units and colleges.

Effective Term: Spring 2018

#### PLPTH 785 - Real-Time PCR Workshop

Credits: 1

Four half-day lecture and laboratory sessions on real-time PCR primer/probe design, experimentation, and data analysis.

#### **Requisites:**

Prerequisite: One of the following courses: PLPTH 610, AGRON 610, BIOCH 521, BIOCH 522, BIOL 675, BIOL 676.

#### **Typically Offered**

Fall, Summer

**Rationale:** Content from PLPTH 780 Gene Expression Analysis Workshop and PLPTH 785 Real-Time PCR Workshop will be incorporated into the PLPTH 885 Introduction to Genomic Technologies Workshop course.

The Undergraduate Minor in Applied Genomics and Biotech was previously eliminated and is no longer offered. These courses are currently listed as electives for the Graduate Certificate in Genetics and Genomics. The faculty involved with this Certificate Program will be proposing changes to the certificate requirements in Fall 2017.

**Impact**: The Undergraduate Minor in Applied Genomics and Biotech was previously eliminated and is no longer offered.

These courses are currently listed as electives for the Graduate Certificate in Genetics and Genomics. The faculty involved with this Certificate Program will be proposing changes to the certificate requirements in Fall 2017.

Master of Public Heath

From:	То:
Food Safety and Biosecurity	Food Safety and Biosecurity
Required courses (4 credit hours):	Required courses (4 credit hours):
<ul> <li>FDSCI 730 - A Multidisciplinary Overview of Food Safety and Security Credits: 2</li> <li>FDSCI 731 - Food Protection and Defense– Essential Concepts Credits: 2</li> </ul>	<ul> <li>FDSCI 730 - A Multidisciplinary Overview of Food Safety and Security Credits: 2</li> <li>FDSCI 731 - Food Protection and Defense– Essential Concepts Credits: 2</li> </ul>
Minimum 6 credit hours from the following:	Minimum 6 credit hours from the following:
<ul> <li>DMP 855 - Disease Detection, Surveillance and Risk Assessment Credits: 3</li> <li>FDSCI 600 - Food Microbiology Credits: 2</li> <li>FDSCI 690 - Principles of HACCP and HARPC Credits: 3</li> <li>FDSCI 750 - Food Toxicants Credits: 2</li> <li>FDSCI 753 - Risk Assessment for Food, Ag, &amp; Vet Med Credits: 3</li> <li>FDSCI 791 - Advanced Application of HACCP Principles Credits: 3</li> </ul>	<ul> <li>DMP 855 - Disease Detection, Surveillance and Risk Assessment Credits: 3</li> <li>FDSCI 600 - Food Microbiology Credits: 2</li> <li>FDSCI 690 - Principles of HACCP and HARPC Credits: 3</li> <li>FDSCI 750 - Food Toxicants Credits: 2</li> <li>FDSCI 753 - Risk Assessment for Food, Ag, &amp; Vet Med Credits: 3</li> <li>FDSCI 791 - Advanced Application of HACCP Principles Credits: 3</li> </ul>
Minimum 2 credit hours from the following:	Minimum 2 credit hours from the following:
<ul> <li>DMP 816 - Trade and Agricultural Health Credits: 2</li> <li>DMP 844 - Global Health Issues Credits: 3</li> </ul>	<ul> <li>DMP 816 - Trade and Agricultural Health Credits: 2</li> <li>DMP 844 - Global Health Issues Credits: 3</li> </ul>
Minimum 3 credit hours from the following:	Minimum 3 credit hours from the following:
<ul> <li>DMP 815 - Multidisciplinary Thought and Presentation Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> </ul>	<ul> <li><u>AAI 801 – Interdisciplinary Process Credits: 3</u></li> <li>DMP 815 - Multidisciplinary Thought and Presentation Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> </ul>
Select remaining courses needed (0-7 credit hours) from any of the courses listed above or from the following:	Select remaining courses needed (0-7 credit hours) from any of the courses listed above or from the following:
<ul> <li>DMP 710 - Introduction to One Health Credits: 2</li> <li>DMP 806 - Environmental Toxicology Credits: 2</li> <li>DMP 880 - Problems in Pathobiology (MS) Credits: 1-6</li> <li>DMP 888 - Globalization, Cooperation, &amp; the Food Trade Credits: 1</li> <li>EDSCI 601 - Food Microbiology Lab Credits: 2</li> </ul>	<ul> <li>DMP 710 - Introduction to One Health Credits: 2</li> <li>DMP 806 - Environmental Toxicology Credits: 2</li> <li>DMP 880 - Problems in Pathobiology (MS) Credits: 1-6</li> <li>DMP 888 - Globalization, Cooperation, &amp; the Food Trade Credits: 1</li> <li>EDSCI 601 - Food Microbiology Lab Credits: 2</li> </ul>

<ul> <li>FDSCI 695 - Quality Assurance of Food Products Credits: 3</li> <li>FDSCI 751 - Food Laws and the Regulatory Process Credits: 2</li> <li>FDSCI 820 - Advanced Food Microbiology &amp; Biotechnology Credits: 2</li> <li>STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>Infectious Diseases and Zoonoses</li> </ul>	<ul> <li>FDSCI 695 - Quality Assurance of Food Products Credits: 3</li> <li>FDSCI 751 - Food Laws and the Regulatory Process Credits: 2</li> <li>FDSCI 820 - Advanced Food Microbiology &amp; Biotechnology Credits: 2 STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>Infectious Diseases and Zoonoses</li> </ul>
6-7 credit hours from the following:	6-7 credit hours from the following:
<ul> <li>ASI 540 - Principles of Animal Disease Control Credits: 3</li> <li>BIOL 530 - Pathogenic Microbiology Credits: 3</li> <li>BIOL 545 - Human Parasitology Credits: 3</li> <li>BIOL 546 - Human Parasitology Laboratory Credits: 1</li> <li>BIOL 604 - Biology of the Fungi Credits: 3</li> <li>BIOL 675 - Genetics of Microorganisms Credits: 3</li> <li>BIOL 687 - Microbial Ecology Credits: 3</li> <li>BIOL 730 - General Virology Credits: 3</li> <li>DMP 712 - Veterinary Bacteriology &amp; Mycology - Lecture Credits: 3</li> <li>DMP 718 - Veterinary Parasitology Credits: 4</li> <li>DMP 722 - Veterinary Virology Credits: 3</li> <li>DMP 860 - Pathogenic Mechanisms Credits: 3</li> </ul>	<ul> <li>ASI 540 - Principles of Animal Disease Control Credits: 3</li> <li>BIOL 530 - Pathogenic Microbiology Credits: 3</li> <li>BIOL 545 - Human Parasitology Credits: 3</li> <li>BIOL 546 - Human Parasitology Laboratory Credits: 1</li> <li>BIOL 604 - Biology of the Fungi Credits: 3</li> <li>BIOL 675 - Genetics of Microorganisms Credits: 3</li> <li>BIOL 687 - Microbial Ecology Credits: 3</li> <li>BIOL 687 - Microbial Ecology Credits: 3</li> <li>BIOL 730 - General Virology Credits: 3</li> <li>DMP 712 - Veterinary Bacteriology &amp; Mycology - Lecture Credits: 3</li> <li>DMP 718 - Veterinary Parasitology Credits: 4</li> <li>DMP 722 - Veterinary Virology Credits: 3</li> <li>DMP 860 - Pathogenic Mechanisms Credits: 3</li> </ul>
3-4 credit hours from the following:	3-4 credit hours from the following:
<ul> <li>BIOL 670 - Immunology Credits: 4</li> <li>DMP 705 - Principles of Veterinary Immunology Credits: 2</li> <li>DMP 850 - Immunology of Domestic Animals Credits: 3</li> </ul>	<ul> <li>BIOL 670 - Immunology Credits: 4</li> <li>DMP 705 - Principles of Veterinary Immunology Credits: 2</li> <li>DMP 850 - Immunology of Domestic Animals Credits: 3</li> <li>DMP 880 - Problems in Pathobiology Credits: 1-6</li> </ul>
3-6 credit hours from the following:	3-6 credit hours from the following:
<ul> <li>BIOL 529 - Fundamentals of Ecology Credits: 3</li> <li>DMP 710 - Introduction to One Health Credits: 2</li> <li>DMP 770 - Emerging Diseases Credits: 3</li> <li>DMP 801 - Toxicology Credits: 2</li> <li>DMP 806 - Environmental Toxicology Credits: 2</li> <li>DMP 816 - Trade and Agricultural Health Credits: 2</li> <li>DMP 844 - Global Health Issues Credits: 3</li> <li>DMP 888 - Globalization, Cooperation, &amp; the Food Trade Credits: 1</li> <li>ENTOM 849 - Biology of Disease Vectors of Human and Veterinary Importance Credits: 3</li> </ul>	<ul> <li>BIOL 529 - Fundamentals of Ecology Credits: 3</li> <li>DMP 710 - Introduction to One Health Credits: 2</li> <li>DMP 770 - Emerging Diseases Credits: 3</li> <li>DMP 801 - Toxicology Credits: 2</li> <li>DMP 806 - Environmental Toxicology Credits: 2</li> <li>DMP 816 - Trade and Agricultural Health Credits: 2</li> <li>DMP 844 - Global Health Issues Credits: 3</li> <li>DMP 888 - Globalization, Cooperation, &amp; the Food Trade Credits: 1</li> <li>ENTOM 849 - Biology of Disease Vectors of Human and Veterinary Importance Credits: 3</li> </ul>

<ul> <li>FDSCI 690 - Principles of HACCP and HARPC Credits: 3</li> <li>FDSCI 730 - A Multidisciplinary Overview of Food Safety and Security Credits: 2</li> <li>FDSCI 731 - Food Protection and Defense– Essential Concepts Credits: 2</li> <li>GEOG 508 - Geographic Information Systems I Credits: 4</li> <li>GEOG 608 - Geographic Information Systems II Credits: 3</li> </ul>	<ul> <li>FDSCI 690 - Principles of HACCP and HARPC Credits: 3</li> <li>FDSCI 730 - A Multidisciplinary Overview of Food Safety and Security Credits: 2</li> <li>FDSCI 731 - Food Protection and Defense– Essential Concepts Credits: 2</li> <li>GEOG 508 - Geographic Information Systems I Credits: 4</li> <li>GEOG 608 - Geographic Information Systems II Credits: 3</li> </ul>
3-6 credit hours from the following:	3-6 credit hours from the following:
<ul> <li>DMP 753 - Veterinary Public Health Credits: 2</li> <li>DMP 830 - Quantitative Analysis in Food Production Veterinary Medicine Credits: 3</li> <li>DMP 854 - Intermediate Epidemiology Credits: 3</li> <li>DMP 855 - Disease Detection, Surveillance and Risk Assessment Credits: 3</li> <li>DMP 871 - Molecular Diagnostics of Infectious Diseases Credits: 3</li> <li>DMP 954 - Advanced Epidemiology Credits: 4</li> <li>STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>STAT 716 - Nonparametric Statistics Credits: 3</li> <li>STAT 717 - Categorical Data Analysis Credits: 3</li> <li>STAT 720 - Design of Experiments Credits: 3</li> <li>STAT 730 - Multivariate Statistical Methods Credits: 3</li> </ul>	<ul> <li>DMP 753 - Veterinary Public Health Credits: 2</li> <li>DMP 830 - Quantitative Analysis in Food Production Veterinary Medicine Credits: 3</li> <li>DMP 854 - Intermediate Epidemiology Credits: 3</li> <li>DMP 855 - Disease Detection, Surveillance and Risk Assessment Credits: 3</li> <li>DMP 871 - Molecular Diagnostics of Infectious Diseases Credits: 3</li> <li>DMP 954 - Advanced Epidemiology Credits: 4</li> <li>STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>STAT 716 - Nonparametric Statistics Credits: 3</li> <li>STAT 717 - Categorical Data Analysis Credits: 3</li> <li>STAT 720 - Design of Experiments Credits: 3</li> <li>STAT 730 - Multivariate Statistical Methods Credits: 3</li> </ul>
3 credit hours from the following:	3 credit hours from the following:
<ul> <li>DMP 815 - Multidisciplinary Thought and Presentation Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> <li>Select remaining courses needed (0-4 hours) from any of the courses listed above.</li> </ul>	<ul> <li><u>AAI 801 – Interdisciplinary Process Credits: 3</u></li> <li>DMP 815 - Multidisciplinary Thought and Presentation Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> <li>Select remaining courses needed (0-4 hours) from any of the courses listed above.</li> </ul>
Public Health Nutrition	Public Health Nutrition
Required courses (10 credit hours):	Required courses (10 credit hours):
<ul> <li>FNDH 600 - Public Health Nutrition Credits: 3</li> <li>FNDH 820 - Functional Foods for Chronic Disease Prevention Credits: 3</li> <li>FNDH 844 - Nutritional Epidemiology Credits: 3</li> <li>FNDH 880 - Graduate Seminar in Human Nutrition Credits: 1</li> </ul>	<ul> <li>FNDH 600 - Public Health Nutrition Credits: 3</li> <li>FNDH 820 - Functional Foods for Chronic Disease Prevention Credits: 3</li> <li>FNDH 844 - Nutritional Epidemiology Credits: 3</li> <li>FNDH 880 - Graduate Seminar in Human Nutrition Credits: 1</li> </ul>

6-11 credit hours from the following:	6-11 credit hours from the following:
<ul> <li>FNDH 620 - Nutrient Metabolism Credits: 3</li> <li>FNDH 631 - Clinical Nutrition I Credits: 3</li> <li>FNDH 632 - Clinical Nutrition II Credits: 3</li> <li>FNDH 635 - Nutrition and Exercise Credits: 3</li> <li>FNDH 700 - Global Health and Nutrition Credits: 3</li> <li>FNDH 718 - Physical Health and Aging Credits: 3</li> <li>FNDH 726 - Nutrition and Wellness Credits: 3</li> <li>FNDH 735 - Advanced Energy Balance Credits: 3</li> <li>FNDH 780 - Problems in Human Nutrition Credits: 1-18</li> <li>FNDH 782 - Topics in Human Nutrition Credits: 1-3</li> <li>FNDH 800 - Nutrition Education and Communication Credits: 3</li> <li>FNDH 810 - Advanced Macronutrient Metabolism Credits: 5</li> <li>FNDH 812 - Advanced Micronutrient Metabolism Credits: 1</li> <li>FNDH 841 - Consumer Research - Fundamentals Credits: 1</li> <li>FNDH 891 - Environmental Scanning and Analysis of Current Issues in Dietetics Credits: 3</li> </ul>	<ul> <li>FNDH 620 - Nutrient Metabolism Credits: 3</li> <li>FNDH 631 - Clinical Nutrition I Credits: 3</li> <li>FNDH 632 - Clinical Nutrition II Credits: 3</li> <li>FNDH 635 - Nutrition and Exercise Credits: 3</li> <li>FNDH 700 - Global Health and Nutrition Credits: 3</li> <li>FNDH 718 - Physical Health and Aging Credits: 3</li> <li>FNDH 726 - Nutrition and Wellness Credits: 3</li> <li>FNDH 735 - Advanced Energy Balance Credits: 3</li> <li>FNDH 780 - Problems in Human Nutrition Credits: 1-18</li> <li>FNDH 782 - Topics in Human Nutrition Credits: 1-3</li> <li>FNDH 800 - Nutrition Education and Communication Credits: 3</li> <li>FNDH 810 - Advanced Macronutrient Metabolism Credits: 5</li> <li>FNDH 812 - Advanced Micronutrient Metabolism Credits: 3</li> <li>FNDH 841 - Consumer Research - Fundamentals Credits: 1</li> <li>FNDH 862 - Maternal and Child Nutrition Credits: 3</li> <li>FNDH 891 - Environmental Scanning and Analysis of Current Issues in Dietetics Credits: 3</li> </ul>
3-9 credit hours from the following:	3-9 credit hours from the following:
<ul> <li>FSHS 714 - Program Design, Evaluation, and Implementation Credits: 3</li> <li>KIN 610 - Program Planning and Evaluation Credits: 3</li> <li>KIN 805 - Physical Activity and Human Behavior Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> <li>PSYCH 518 - Introduction to Health Psychology Credits: 3</li> <li>SOCIO 541 - Wealth, Power, and Privilege Credits: 3</li> <li>SOCIO 570 - Race and Ethnic Relations in the USA Credits: 3</li> <li>STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>STAT 710 - Sample Survey Methods Credits: 3</li> <li>STAT 713 - Applied Linear Statistical Models Credits: 3</li> </ul>	<ul> <li><u>AAI 801 – Interdisciplinary Process Credits: 3</u></li> <li>FSHS 714 - Program Design, Evaluation, and Implementation Credits: 3</li> <li>KIN 610 - Program Planning and Evaluation Credits: 3</li> <li>KIN 805 - Physical Activity and Human Behavior Credits: 3</li> <li>MC 750 - Strategic Health Communication Credits: 3</li> <li>MC 760 - Communication and Risk Credits: 3</li> <li>PSYCH 518 - Introduction to Health Psychology Credits: 3</li> <li>SOCIO 541 - Wealth, Power, and Privilege Credits: 3</li> <li>SOCIO 570 - Race and Ethnic Relations in the USA Credits: 3</li> <li>STAT 705 - Regression and Analysis of Variance Credits: 3</li> <li>STAT 710 - Sample Survey Methods Credits: 3</li> </ul>

- STAT 716 Nonparametric Statistics Credits: 3
- STAT 717 Categorical Data Analysis Credits:

3

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Credits: 3

• STAT 716 - Nonparametric Statistics Credits: 3

<ul> <li>STAT 720 - Design of Experiments Credits: 3</li> <li>STAT 725 - Introduction to the SAS Computing</li> </ul>	STAT /1/ - Categorical Data Analysis Credits:     3
Credits: 1	<ul> <li>STAT 720 - Design of Experiments Credits: 3</li> </ul>
STAT 730 - Multivariate Statistical Methods	STAT 725 - Introduction to the SAS Computing
Credits: 3	Credits: 1
	STAT 730 - Multivariate Statistical Methods
	Credits: 3
Public Health Physical Activity	Public Health Physical Activity
Required courses (9 credit hours):	Required courses (9 credit hours):
KIN 610 - Program Planning and Evaluation	KIN 610 - Program Planning and Evaluation
Credits: (3)	Credits: (3)
KIN 612 - Policy, Built Environment and Physical	• KIN 612 - Policy, Built Environment and Physical
Activity Credits: (3)	Activity <b>Credits:</b> (3)
• KIN 805 - Physical Activity and Human Behavior	• KIN 805 - Physical Activity and Human Behavior
Credits: (3)	Credits: (3)
7-10 credit hours from the following:	7-10 credit hours from the following:
KIN 600 - Interpersonal Aspects of Physical     Activity Creditor (2)	<u>AAI 801 – Interdisciplinary Process Credits: 3</u>
Activity <b>Credits:</b> (3)	KIN 600 - Interpersonal Aspects of Physical
• KIN 601 - Cardiorespiratory Exercise Physiology	Activity Creans: (3)
VIN 602 Social Structural Determinants of	• KIN 601 - Cardiorespiratory Exercise Physiology
<ul> <li>KIN 602 - Social Structural Determinants of Develoal Activity Credite: (2)     </li> </ul>	Cleans: (3)
• KIN 606 Topics in the Rehavioral Rasis of	<ul> <li>Kin 602 - Social Structural Determinants of Develoal Activity Credits: (2)     </li> </ul>
Kinesiology Credits: (1-3)	• KIN 606 - Topics in the Behavioral Basis of
KIN 614 - Physical Activity Behavior Settings:	Kinesiology Credits: (1-3)
Youth Sport to Senior Centers <b>Credits</b> : (3)	KIN 614 - Physical Activity Behavior Settings:
KIN 625 - Exercise Testing and Prescription	Youth Sport to Senior Centers <b>Credits</b> : (3)
Credits: (3)	KIN 625 - Exercise Testing and Prescription
• KIN 635 - Nutrition and Exercise Credits: (3)	Credits: (3)
KIN 655 - Individual Physical Activity Promotion	• KIN 635 - Nutrition and Exercise Credits: (3)
Credits: (3)	KIN 655 - Individual Physical Activity Promotion
<ul> <li>KIN 797 - Topics in Public Health Physical</li> </ul>	Credits: (3)
Activity Behavior Credits: (3)	KIN 797 - Topics in Public Health Physical
<ul> <li>KIN 815 - Research Methods in Kinesiology</li> </ul>	Activity Behavior Credits: (3)
Credits: (3)	<ul> <li>KIN 815 - Research Methods in Kinesiology</li> </ul>
<ul> <li>KIN 851 - Topics in the Physiological Basis of</li> </ul>	Credits: (3)
Kinesiology Credits: (1-3)	<ul> <li>KIN 851 - Topics in the Physiological Basis of</li> </ul>
KIN 852 - Topics in the Behavioral Basis of	Kinesiology Credits: (1-3)
Kinesiology Credits: (1-3)	KIN 852 - Topics in the Behavioral Basis of
KIN 896 – Independent Study (instructor	Kinesiology Credits: (1-3)
permission required <b>Credits (1-3)</b>	KIN 896 – Independent Study (instructor
• FNDH 600 – Public Health Nutrition Credits: (3)	permission required <b>Credits (1-3)</b>
<ul> <li>FNDH 844 – Nutritional Epidemiology Credits:</li> </ul>	• FNDH 600 – Public Health Nutrition Credits: (3)
(3) MC 750 Stratagic Health Communication	• FNDH 844 – Nutritional Epidemiology Credits:
• INC 750 - Strategic Health Communication	(3) • MC 750 Stratagic Health Communication
SOC 5/1 - Wealth Power & Privilege Credits:	MC 750 - Strategic Health Communication     Credite: 3
(3)	SOC 541 – Wealth Power & Privilege Credite:
<ul> <li>SOC 545 – Sociology of Women Credits: (3)</li> </ul>	(3)
• SOC 570 – Race and Ethnic Relations in the	<ul> <li>SOC 545 – Sociology of Women Credits: (3)</li> </ul>
United States Credits: (3)	• SOC 570 – Race and Ethnic Relations in the
STAT 705 - Regression and Analysis of Variance	United States Credits: (3)
Credits: 3	

**Rationale:** Review of curriculum for all emphasis areas indicates a need for an additional course that fulfills the communication competency. Dr. Kastner approved the use of his course (AAI 801 – Interdisciplinary Process) that originates from K-State Olathe and is available online for students on other campuses (<u>AAI = Applied and Interdisciplinary Studies</u>).

Additionally, a problems course (DMP 880 – Problems in Pathobiology) for the Infectious Diseases/Zoonoses emphasis area needs to be added to the list of classes.

Impact: Dr. Kastner approved the use of his course. Interdisciplinary faculty approved the changes.

Effective Term: Spring 2018

Geographic Information Science Graduate Certificate

FROM:

TO:

The course requirements for the Graduate	The course requirements for the Graduate		
Certificate in GIScience are shown belowA	Certificate in GIScience are shown belowA		
minimum of 15 graduate credit hours is required to	minimum of 15 graduate credit hours is required to		
earn the certificate. A maximum of two geospatial	earn the certificate. A maximum of two geospatial		
core courses may be waived and replaced with	core courses may be waived and replaced with		
approved electives in cases where students have	approved electives in cases where students have		
completed prior coursework for undergraduate	completed prior coursework for undergraduate		
credit. A minimum of 12 hours at the 600-level or	credit. A minimum of 12 hours at the 600-level or		
higher is required. Students must earn a minimum	higher is required. Students must earn a minimum		
GPA of 3.33 in the geospatial core to earn the	GPA of 3.33 in the geospatial core to earn the		
certificate.	certificate.		
Prerequisites:	Prerequisites:		
Competence in cartography, thematic mapping, of	Competence in cartography, thematic mapping,		
geodesy, or geomatics (e.g., GEOG 302)	geodesy, or geomatics (e.g., GEOG 302)		
Competence in basic statistics (e.g., STAT 320,	Competence in basic statistics (e.g., STAT 320,		
STAT 330, STAT 350)	STAT 330, STAT 350)		
Competence in object-oriented computer	Competence in object-oriented computer		
programming (e.g., Python)	programming (e.g., Python)		
Geospatial Core (10 credit hours)	Geospatial Core (10 credit hours)		
GEOG 508 Geographic Information Systems I (4)	GEOG 508 Geographic Information Systems I (4)		
GEOG 605 Remote Sensing of the Environment	GEOG 605 Remote Sensing of the Environment		
(3)	(3)		
GEOG 608 Geographic Information Systems II (3)	GEOG 608 Geographic Information Systems II (3)		
Elective courses — Select two (minimum of 6 credit hours):	Elective courses — Select two (minimum of 6 credit hours):		

AGRON 655 Site-Specific Agriculture (3)	AGRON 655 Site-Specific Agriculture (3)
CE 585 Civil Engineering Project (1-3)	BAE 669 Watershed Modeling (3)
CE 752 Advanced Hydrology (3)	BAE 869 Advanced Watershed Modeling (3)
CE 786 Land Development for Civil Engineers and	BIOL 822 Landscape Ecology (4)
Planners (3)	CE 585 Civil Engineering Project (1-3)
CIS 501 Software Architecture and Design (3)	CE 752 Advanced Hydrology (3)
CIS 560 Database System Concepts (3)	CE 786 Land Development for Civil Engineers and
CIS 635 Introduction to Computer-based	Planners (3)
Knowledge Systems (3)	CE 857 Advanced Civil Engineering Design using
CIS 636 Introduction to Computer Graphics	<u>GIS (3)</u>
(3) GEOG 602 Computer Mapping and	
Geographic Visualization (3)	CIS 501 Software Architecture and Design (3)
GEOG 610 Geography Internship (1-3)	CIS 560 Database System Concepts (3)
GEOG 700 Quantitative Analysis in Geography (3)	CIS 635 Introduction to Computer-based Knowledge
GEOG 705 Thematic Remote Sensing (3)	CIS 626 Introduction to Computer Craphics (2)
GEOG 706 Biophysical Remote Sensing (3)	CIS 656 Introduction to Computer Graphics (5)
GEOG 709 Geography Field Research Techniques	CIS 750 Computer Graphics (5) CIS 761 Detebace Management Systems (2)
(23) GEOG 711 Tonics in Remote Sensing (3)	COT 674 Processing Techniques for Low Altitude
GEOG 711 Topics in Remote Sensing (3)	COT 674 Processing Techniques for Low-Altitude
	COT 676 Low Altitude Demote Sensing
(S) GEOG 728 Topics in Programming for Geographic	COT 676 Low-Alliade Remote-Sensing
Analysis (3)	DMP 725 CIS Applications in Animal and Public
GEOG 795 Topics in Geographic Information	Health (2)
Science (1-3)	DMP 726 GIS Applications in Animal and Public
GEOG 808 Geocomputation (3)	Health Lab (1)
GEOG 880 Spatial Data Analysis and Modeling (3)	GEOG 602 Computer Mapping and Geographic
GEOG 890 Advanced Spatial Analysis Techniques	Visualization (3)
	GEOG 610 Geography Internship (1-3)
GEOG 895 Tonics in Spatial Analysis (1-3)	GEOG 700 Quantitative Analysis in Geography (3)
I AR 704 Environmental Landscape Planning and	GEOG 705 Thematic Remote Sensing (3)
Design (5)	GEOG 706 Biophysical Remote Sensing (3)
PLAN 801 Planning Methods 1 (3)	GEOG 707 Remote Sensing of Water (3)
PLAN 836 Community Plan Preparation (3)	GEOG 709 Geography Field Research Techniques
STAT 703 Statistical Methods for Natural Scientists	(2-3)
(3)	GEOG 711 Topics in Remote Sensing (3)
STAT 705 Regression and Analysis of Variance (3)	GEOG 712 Internet GIS and Distributed GIServices
5, , , , , , , , , , , , , , , , , , ,	(3)
	GEOG 728 Topics in Programming for Geographic
	Analysis (3)
	GEOG 790 Seminar in Geography (3)
	GEOG 795 Topics in Geographic Information
	Science (1-3)
	GEOG 808 Geocomputation (3)
	GEOG 880 Spatial Data Analysis and Modeling (3)
	GEOG 890 Advanced Spatial Analysis Techniques
	(3)
	GEOG 895 Topics in Spatial Analysis (1-3)
	HOR 1 820 Quantitative Agricultural Remote Sensing
	<u>(3)</u>
	LAR 704 Environmental Landscape Planning and
	Design ( <del>ə</del> ) <u>(3)</u>
	AR 580 Planning & Design Intro to GIS (2)
	MATH 615 Introduction to Digital Image Processing
	(3)
	NU PLAN 801 Planning Methods 1 (3)
	$PI \Delta N 836 Community Plan Dreparation (2)$
	TLAN 000 Community Flatt Fleparation (3) STAT 703 Statistical Mathade for Natural Scientista
	(7) STAT 705 Regression and Analysis of Marianas (2)
	OTAT TOO REGIESSION AND AND YOU VANDING (3)

STAT 726 Introduction to R Computing I
STAT 903 Statistical Methods for Spatial Data (3)

RATIONALE: This is a routine update of the Geographic Information Science Graduate Certificate to reflect recent changes in course names/numbers and cross-listings, as well as to expand the list of pre-approved elective courses. Potentially impacted departments were contacted for comment on February 24, 2017.

IMPACT: BAE, BIOL, CE, CIS, COT, DMP, GEOG, HORT, LAR, MATH, STAT.

EFFECTIVE DATE: Spring 2018

# MATHEMATICS -APPLIED MATHEMATICS GRADUATE CERTIFICATE

## FROM:

Core Courses (6 credit hours) MATH 715 Applied Mathematics I | 3 credits MATH 716 Applied Mathematics II | 3 credits

Elective Courses (minimum of 6 credit hours)

MATH 615 Introduction to Digital Image Processing | 3 credits MATH 635 Dynamics, Chaos, and Fractals | 3

credits MATH 789 Combinatorial Analysis | 3 credits

IMSE 881 Linear Programming | 3 credits IMSE 882 Network Flows and Graph Theory | 3 credits

IMSE 884 Integer Programming and Combinatorial Optimization | 3 credits IMSE 982 Nonlinear Programming | 3 credits

ECE 840 Computer Engineering Methods for Analysis, Simulation, and Design | 3 credits ECE 861 Noise Theory | 3 credits ECE 963 Signal Detection Theory | 3 credits ECE 965 Information Theory | 3 credits

**CE 803** Numerical and Analytic Techniques for Engineers | 3 credits

STAT 704 Analysis of Variance | 2 credits
STAT 705 Regression and Correlation Analysis | 2 credits
STAT 710 Sample Survey Methods | 2 credits
STAT 713 Applied Linear Statistical Models | 4 credits
STAT 716 Nonparametric Statistics | 2 credits
STAT 717 Categorical Data Analysis | 3 credits
STAT 720 Design of Experiments | 3 credits .
STAT 722 Experimental Design for Product
Development and Quality Improvement | 3 credits
STAT 730 Multivariate Statistical Methods | 3

credits STAT 736 Bioassay | 2 credits

STAT 745 Statistical Graphics | 3 credits

# **TO**:

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Core Courses (6 credit hours) MATH 715 Applied Mathematics I | 3 credits MATH 716 Applied Mathematics II | 3 credits

Elective Courses (minimum of 6 credit hours)

MATH 615 Introduction to Digital Image Processing | 3 credits MATH 635 Dynamics, Chaos, and Fractals | 3 credits

MATH 725 The Mathematics of Data and Networks

Math 726 The Mathematics of Data and Networks

MATH 789 Combinatorial Analysis | 3 credits

MATH 801 Numerical Solution of Differential Equations I

MATH 802 Numerical Solution of Differential Equations I

IMSE 881 Linear Programming | 3 credits IMSE 882 Network Flows and Graph Theory | 3 credits

IMSE 884 Integer Programming and Combinatorial Optimization | 3 credits IMSE 982 Nonlinear Programming | 3 credits

ECE 840 Computer Engineering Methods for Analysis, Simulation, and Design | 3 credits ECE 861 Noise Theory | 3 credits ECE 963 Signal Detection Theory | 3 credits ECE 965 Information Theory | 3 credits

**CE 803** Numerical and Analytic Techniques for Engineers | 3 credits

**STAT 704** Analysis of Variance | 2 credits **STAT 705** Regression and Correlation Analysis | 2 credits **STAT 710** Sample Survey Methods | 2 credits

STAT 713 Applied Linear Statistical Models   4
credits
STAT 716 Nonparametric Statistics   2 credits
STAT 717 Categorical Data Analysis   3 credits
STAT 720 Design of Experiments   3 credits .
STAT 722 Experimental Design for Product
Development and Quality Improvement   3 credits
STAT 730 Multivariate Statistical Methods   3
credits
STAT 736 Bioassay   2 credits
STAT 745 Statistical Graphics   3 credits
ME 820 Intermediate Topics in Thermal and Fluid
Mechanics (Rational Mechanics of Fluids)
CIS625 Concurrent Software Systems
CIS770 Formal Language Theory
CIS775 Analysis of Algorithms

RATIONALE: It is proposed here to add elective courses to the curriculum of the Graduate Certificate in Applied Mathematics. The proposed changes are necessitated by both growth of the Applied Mathematics program at the Department of Mathematics, and increased interest to the Graduate Certificate in Applied Mathematics from other departments.

IMPACT: The proposed changes have been approved by the departments that offer the courses. Letters of support from the corresponding departments are attached.

EFFECTIVE DATE: Spring 2018

# Appendix D: Curriculum Form Kansas State University

(This includes additions, deletions, and changes)

Department: Modern Languages Dept Head Signature: Inch to flow	Date:	8 AUG	16
Contact person(s) for this proposal: Earl Brown			
Program name: Teaching English as a Foreign Language Graduate Certificate			
(See below to determine whether this change can go through expedite	ed proc	ess)	

#### (Please select one of the boxes below)

# **Expedited Process includes, but is not limited to: (CANNOT HAVE IMPACT ON OTHER COLLEGES)**

& Curriculum change

+ Other minor changes (to be identified and defended by the department).

#### Non- Expedited Process includes, but is not limited to:

Changing the required number of credits for completion of a program

& Curriculum change (when this impacts another unit outside the college)

Addition or deletion of an academic sub plan or plan (option, specialization, minor, certificate, etc.).

Effective term for requested action:	Term <u>Fall</u>	Year <u>2017</u>	
Please note the following deadlines:			
Curriculum Changes effective for:	fust be submitted to Faculty Ser	nate Must l	be approved by
A	cademic Affairs prior to:	Facult	y Senate by:
Fall 2	<sup>nd</sup> April meeting	May n	neeting
Spring 2	<sup>nd</sup> September meeting	Octob	er meeting
Summer 2	<sup>nd</sup> January meeting	Februa	ary meeting

Please see guidelines in the Kansas Board of Regents (KBOR) policy manual regarding format of new degree program proposals that require KBOR approval (including new majors, secondary majors, and minors not within an existing degree program, etc.)

http://www.kansasregents.org/policy\_chapter\_ii\_a\_new\_academic\_units\_and\_programs

**Rationale:** The Department of Modern Languages, working closely with the English Language Program, proposes an 18-hour Graduate Certificate program in Teaching English as a Foreign Language (TEFL), as a natural extension of its existing 30-hour MA degree in TEFL.

Impact (i.e. if this impacts another unit) – Statement should include the date when the head of a unit was contacted, and the response or lack of: Three credit hours (1 course) may be taken from other units, as is the case with the already-established MA program in TEFL.

Entire curriculum, curriculum description or admission criteria must be shown below. Be sure to use current catalog information.

Strike through the deleted courses or wording within the curriculum description or admission criteria.

FROM: (Current list of courses for the curriculum, curriculum description, and admission criteria. Be sure to use current catalog information)

Underline new courses, edited version of the curriculum description or admission criteria.

TO: To: (Proposed list of courses for the curriculum, curriculum description, and admission criteria.)

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Proposed list of courses:
1. MLANG 600: Principles of Linguistics
2. MLANG 710: Foreign Language Pedagogy
3 MLANG 770: Theories of SLA
4 MLANG 803: Oral Practicum
5 MI ANG 804: Written Practicum
6 Approved elective from but not limited to the
following:
a linguistica oriented graduate seminar numbered
• a miguistics-offented graduate seminar numbered
MILANO 779
• ENGL 700: Old English
• ENGL 757: Studies in Language and Linguistics
• ENGL 820: Seminar in Language
<ul> <li>ENGL 890: History of the English Language</li> </ul>
<ul> <li>ANTH 514: Language and Culture</li> </ul>
<ul> <li>ANTH 523: Topics in Linguistic Anthropology</li> </ul>
<ul> <li>ANTH 792: Field Methods in Linguistics</li> </ul>
PHILO 625: The Philosophy of Language
EDCI 720: ESL/Dual Language Methods
• EDCI 731: ESL/Dual Language Linguistics
EDCI 742: ESL/Dual Language Assessment
COMM 780: Intercultural Communication
• COMM 780. Intercultural Communication
Curriculum description:
The Graduate Certificate Program in Teaching English as a
Foreign Language is intended for aspiring teachers of English
for non-native speakers, as well as for practicing teachers who
would like to enhance their skills and credentials. Students will
be better prepared to teach English in a wide range of contexts.
both abroad and domestically or to pursue a graduate degree in
TEFL or another field within applied linguistics. A total of 18
credit hours are required to complete the certificate program 15
hours (5 courses) of required core courses and 3 hours (1
nourse) of an approved elective courses, and 5 hours (1
course) of an approved elective course.
Admission criteria
Applicants must hold a BA in a related field (e.a. language
education etc.) or must be pursuing an MA in a related field
Applicants with a different academic background may at most
be permitted probationary admission, with stipulations for
active probationally admission, with supulations for
semester in the program
semester in the program.

Please attach additional page(s) if needed.

#### For Office Use

Date approved by Department Faculty: Date approved by College Course and Curriculum committee: Date approved by College Faculty (if needed): Date approved by Graduate Council (if needed): Date approved by Faculty Senate (if needed): Date approved by Board of Regents (if needed):

1

S. ...

# Graduate Certificate Proposal Teaching English as a Foreign Language (TEFL) Department of Modern Languages and English Language Program Kansas State University

# A. Educational Objectives of the Certificate Program

The graduate certificate program proposed here is intended for aspiring teachers of English for nonnative speakers, as well as for practicing teachers who would like to enhance their skills and credentials. Upon completion of the program, students will be better prepared to teach English in a wide range of contexts, both abroad and domestically, or to pursue a graduate degree in TEFL or another field within applied linguistics. The program requirements generally align with standards for teaching professionals set forth by the Commission on English Language Program Accreditation (available at http://cea-accredit.org/about-cea/standards). Further, the educational objectives of the program are informed by the Mission Statement of the Department of Modern Languages, which (in part), is to "…prepare a linguistically competent and culturally aware citizenry poised to live and work in an increasingly global and diverse society…." The program includes coursework in linguistics, theories of second language acquisition, foreign language pedagogy as well as practical experience within English language classes at K-State.

The educational objectives of the program are that students:

- Strengthen their knowledge and usage of English in academic contexts
- Develop a deeper understanding of languages as systems of communication
- Develop knowledge of second language learning theories
- Demonstrate knowledge of foreign language pedagogy approaches
- Apply foreign language pedagogical approaches with adult learners

# **B.** Courses in the Certificate Program

This graduate certificate program will consist of five required courses and one approved elective course:

- 1. MLANG 600: Principles of Linguistics: Language Structure and Language Usage
- 2. MLANG 710: Foreign Language Pedagogy
- 3. MLANG 770: Theories of Second Language Acquisition
- 4. MLANG 803: Practicum in Adult TESL: Oral communication
- 5. MLANG 804: Practicum in Adult TESL: Written communication
- 6. Elective course approved by the TEFL Advisor before enrollment

The course descriptions follow:

## MLANG 600: Principles of Linguistics: Language Structure and Language Usage

Introduction to the fundamentals of linguistic analysis, including the sound system (phonetics and phonology), word formation (morphology), sentence formation (syntax), meaning (semantics and pragmatics). Formal and functional (usage-based) perspectives. Application of linguistics to language acquisition theory and to pedagogy.

# MLANG 710: Foreign Language Pedagogy

Second and foreign language pedagogical theory is combined with the examination of practical concerns in the teaching of languages, in order to provide future and current instructors with the necessary background for making informed decisions concerning classroom practices. Taught in English.

# MLANG 770: Theories of Second Language Acquisition

Introduction to the major theoretical frameworks of second language acquisition (SLA). Reading, discussion, and analysis of SLA research on a variety of linguistic and learning issues.

# MLANG 803: Practicum in Adult TESL: Oral communication

Provides an overview of current issues and methodology in TESL/TEFL and a foundation for further exploration of techniques used in skill specific areas of oral communication.

# MLANG 804: Practicum in Adult TESL: Written communication

Provides an overview of current issues and methodology in TESL/TEFL and a foundation for further exploration of techniques used in skill specific areas of written communication.

## One elective course approved by the TEFL Advisor before enrollment

Courses that fulfill this elective include, but are not necessarily limited to:

- a linguistics-oriented graduate seminar numbered MLANG 779
- ENGL 700: Old English
- ENGL 757: Studies in Language and Linguistics
- ENGL 820: Seminar in Language
- ENGL 890: History of the English Language
- ANTH 514: Language and Culture
- ANTH 523: Topics in Linguistic Anthropology
- ANTH 792: Field Methods in Linguistics
- PHILO 625: The Philosophy of Language
- EDCI 720: ESL/Dual Language Methods
- EDCI 731: ESL/Dual Language Linguistics
- EDCI 742: ESL/Dual Language Assessment
- COMM 780: Intercultural Communication

The sequence in which a student will take these six courses is as follows:

Fall semester:

- MLANG 600: Principles of Linguistics
- MLANG 710: Foreign Language Pedagogy
- MLANG 803: Oral Practicum

# Spring semester:

- MLANG 770: Theories of SLA
- MLANG 804: Written Practicum
- Approved elective

As such, students will only be admitted into the certificate program in Fall Semester, rather than in both Fall and Spring Semesters, as is the case with the already-established MA program in TEFL.

# C. How the Courses Meet the Stated Educational Objectives

The five required courses and the one elective course align well with the stated educational objectives. The purpose of MLANG 600 is to introduce students to the scientific study of language and the various subfields with linguistics. A large component of this course is to give students exposure to the ways in which languages across the world, rather than only English, accomplish the task of communication. This is performed through the analysis of sounds, words, sentences, and meaning. MLANG 770 presents a survey of the theories that have spawned from as well as informed the study of the acquisition of second languages, including early theories (e.g., Universal Grammar, Contrastive Analysis, Monitor Model) as well as ones that are more widely adhered to today (cognitive, interactionist, sociocultural and sociolinguistic approaches). MLANG 710 presents a robust review of recent methodological approaches to teaching foreign and second languages and challenges students to define their own teaching philosophy. The focus of this course is on adult learners of foreign and second languages, rather than child and youth learners. The practicum courses, MLANG 803 and MLANG 804, offer the students the opportunity to see firsthand English instruction to non-native speakers and to put into practice the theory and methods they learn in those two courses as well as in other courses in the program. The elective course allows the students to explore a topic of interest related to language and society, the teaching of language, and the English language itself.

# D. Need for Certificate Program

English is the lingua franca of international business and science, among other fields. The demand for well-trained English language instructors both within the United States and outside of it is high, likely higher than ever. The success of K-State's English Language Program (ELP) reflects this large need. In the last 10 years, between AY 2005-06 and AY 2014-15, the number of students enrolled in the ELP has more than tripled, from 324 students to 1,036, and the number of student hours has more than quadrupled, from 3,145 student hours to 13,792. Worldwide, more people study English as their second language than any other.

The success of the SLA in TEFL MA degree offered since 2007 by Modern Languages also provides evidence of the sustainability of a graduate certificate program in TEFL. During this short time period, 34 students have graduated with the MA in SLA TEFL. Many have returned to their home country to teach, others are now teaching abroad and domestically at universities and adult language programs on four different continents. Additionally, the popularity of the MA program in TEFL among the MA programs offered by the Department of Modern Languages offers evidence that a graduate certificate program would be successful. As of Fall 2015, of the 21 students in the 7 tracks within the MA degree offered by Modern Languages, a third (7 students) are working on the TEFL track. This number is larger than all other tracks, aside from the SLA in Spanish track (8 students).

# E. Administration of the Certificate Program

Administration for the program is already in place, as the administration of the graduate certificate program will be assumed by the TEFL Advisor of the MA degree program. Supervisory committee membership on the MA degree program comprehensive exam committee rotates annually, with at least one member from the ELP or the Department of English, and the remaining members from MLANG. The exam committee for a given year will serve as the supervisory committee of students in the graduate certificate program. Decisions about admission to the graduate certificate program will be made the larger TEFL committee, which is the case with the already-established MA degree program.

# F. Estimated Budget

As the graduate certificate program proposed here is a shortened version of the MA degree program that Modern Languages already offers, there is no foreseen budgetary implications in the beginning. With five graduate certificate students or less, the core courses (5 of the 6) can easily absorb new students. However, if demand for the program grows, decisions on whether to either cap enrollment or split the core courses into several sections will have to be made. The latter decision would have budgetary implications, as an additional faculty member will likely be needed.

# **G.** Associated Faculty Members

Earl Brown, Modern Languages Janice McGregor, Modern Languages Laura Valentín-Rivera, Modern Languages Li Yang, Modern Languages Mary Copple, Modern Languages Abby Franchitti, English Language Program Beverley Earles, English Language Program Mary Wood, English Language Program Glenda Leung, Center for Intercultural and Multilingual Advocacy Karin Westman, English Mary Kohn, English Phillip Marzluf, English

# H. Program Coordinator

Earl K. Brown, PhD Associate Professor of Spanish Director of Graduate Studies Advisor, MA TEFL Program Department of Modern Languages 104 Eisenhower Hall ekbrown@ksu.edu 785-532-6760

# After Sp17 semester:

Mary T. Copple, PhD Associate Professor of Spanish Department of Modern Languages 104 Eisenhower Hall mcopple@ksu.edu 785-532-6760

# I. Student Learning Outcomes (SLOs) and Assessment Plan

# Knowledge

Students will:

*SLO 1*: Demonstrate knowledge of the ways in which English serves as a system of communication, as well as how it is similar to and different from other languages in the world. *SLO 2*: Distinguish characteristics of second language learning theories and their application to second language teaching.

# Skills

Students will:

*SLO 3*: Demonstrate knowledge of and apply foreign language pedagogical approaches with adult learners of foreign and second languages.

*SLO 4*: Demonstrate proficient use of academic language in extended discourse, whether spoken or written, in English, regardless of first language of students.

# Attitudes and Professional Conduct

Students will:

*SLO 5*: Exhibit an awareness of responsibilities (professional integrity, ethical behavior, ability to work with diverse groups of peoples) and engage in professional conduct towards constituent groups which may include students, faculty, staff, or the public.

# Assessment Plan

The SLOs will be evaluated once per academic year in order to measure the effectiveness of the proposed program. The following table identifies how each SLO relates to the university-wide SLOs for graduate programs, the course or courses in which the SLOs will be evaluated, and the specific assessment instrument that will be used to measure proficiency in that SLO.

Proposed SLO	University-wide graduate SLO	Courses in which the SLO will be evaluated	Assessment
<i>SLO 1</i> : Demonstrate knowledge of the ways in which English serves as a system of communication, as well as how it is similar and different from other languages in the world.	Knowledge	MLANG 600	Midterm and final exams
<i>SLO 2</i> : Distinguish characteristics of second language learning theories and their application to second language teaching.	Knowledge	MLANG 770, 803, 804	Midterm and final exams (770) Final portfolios (803 and 804)
<i>SLO 3</i> : Demonstrate knowledge of and apply foreign language pedagogical approaches with adult learners or foreign and second languages.	Skills	MLANG 803, 804	Micro-teach demonstrations in class and 15- min. lessons in ELP classes
<i>SLO 4</i> : Demonstrate proficient use of academic language in extended discourse, whether spoken or written, in English, regardless of first language of students.	Skills	MLANG 600	Final paper and accompanying conference-style oral presentation
<i>SLO 5</i> : Exhibit an awareness of	Attitudes and	MLANG 710	Final project

responsibilities (professional integrity, ethical behavior, ability to work with diverse groups of peoples) and engage in professional conduct towards constituent groups which may include students, faculty, staff, or the public.	professional conduct		
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# J. Endorsements from Academic Units Impacted by the Certificate Program

While the College of Education offers a graduate certificate in Teaching English as a Second Language for Adult Learners (http://coe.k-state.edu/adulted/certificates/teaching-esl-adults.html), the program proposed here is different. One major difference is the mode of transmission. While the College of Education's program is completed online, the program proposed here is not. This program emphasizes face-to-face interaction that students have with their professors in a brick-and-mortar setting, including the supervised on-site practicum experience with adult learners in a university setting, in the English Language Program, especially in MLANG 803 and MLANG 804. Also, this certificate program includes an emphasis on theoretical approaches to Second Language Acquisition and the subsequent connection of theory with practice in developing and teaching English courses for adults. Lastly, and possibly most importantly, the program proposed here has an international focus, as the use of "foreign language" (rather than "second language") in the title of the proposed program itself connotes.

Drs. Earl Brown and Janice McGregor spoke with Dr. Socorro Herrera on February 10, 2016 about this proposed graduate certificate proposal. Dr. Herrera said that she did not see a conflict, as the audiences for the two programs are different. She mentioned that she would send the response of the College of Education to the appropriate person in the Graduate School in a timely manner.

April 1, 2016

RE: Graduate Certificate Proposal: Teaching English as a Foreign Language (TEFL)

Dear Dr. Brown,

The purpose of this letter is to respond to your TEFL, *Graduate Certificate Proposal*. As you note, this is important because we are already preparing International educators from a number of countries for enhanced EFL teaching in their respective schools, along with professional development for enriched, theory-based teaching practices. In fact, we have to date provided courses to over 1000 in-service teachers from Ecuador and 25 pre-service teachers from Mexico. Further, we have extensively met and planned future course iterations for teachers with Ministries of Education in Mexico, Panama, Chile, and Costa Rica. While each of these programs does not currently seek to offer a graduate certificate or degree for their participating educators, they may do so in the near future.

At a glance, I do not see a major overlap between courses offered in the proposed, TEFL, graduate certificate and our adult education certificate in the College of Education (COE). The proposed program out of Modern Languages seems to have a documented, linguistics focus; where as, the program offered within our College takes a more pedagogical approach.

My main concern will be in duplication of similar programming particularly for international students. However, I believe that through ongoing communication and collaboration, we can make this work. Accordingly, we would expect to be advised of any and all future changes to curricula for the TEFL certificate and propose collaboration to avoid future duplication of recruitment efforts in countries seeking services.

Additionally, I would like to share that we are contemplating a graduate certificate for international educators that would fundamentally, focus on teaching and learning in international settings. The certificate would be offered online with a summer-intensive and on campus component. I look forward to sharing this proposal with you next fall. I am always available to schedule a meeting for purposes of clarification, collaboration, and/or efforts to avert duplication of services. Please feel free to contact CIMA to schedule at any time. Should you have additional questions about our TEFL concerns, our position on the certificate, or efforts to monitor/collaborate please contact me, at your convenience.

Sincerely,

Socorro Herrera Professor of Curriculum & Instruction Executive Director of CIMA College of Education, KSU

# Fwd: Proposed new Graduate Certificate

#### Michael Herman

mar 4/5/2016 9:43 AM

Para:Earl Brown <ekbrown@ksu.edu>;

#### Earl,

See below. You should include these correspondences into the support section of your proposal.

#### Thanks,

Mike

Begin forwarded message:

From: F Goodson <<u>tqoodson@ksu.edu</u>> Subject: Fwd: Proposed new Graduate Certificate Date: April 5, 2016 at 9:00:30 AM CDT To: Michael Herman <<u>mherman@ksu.edu</u>> Cc: Socoro Herrera <<u>sococo@ksu.edu</u>>

#### Dr. Herman,

I have reviewed the proposed TEFL certificate proposal, and I have shared the proposal with critical members of my department. I support the efforts of the Department of Modern Languages and this certificate proposal.

#### tg

F. Todd Goodson Chair, Department of Curriculum and Instruction Kansas State University

Begin forwarded message:

From: Socorro Herrera <<u>sococo@ksu.edu</u>> Subject: Fw: Proposed new Graduate Certificate Date: April 5, 2016 at 8:53:53 AM CDT To: F Goodson <<u>taoodson@ksu.edu</u>>

#### Dr. Goodson,

Let me know how I can help.

Socorro

From: Michael Herman Sent: Tuesday, April 5, 2016 7:37 AM To: Earl Brown Cc: Kate Taylor; Socorro Herrera Subject: Re: Proposed new Graduate Certificate

Dr. Brown and Dr. Herrera,

I appreciate the letter from Dr. Herrera. However, the TEFL certificate proposal really needs to have a statement of support/acknowledgement from the head of the department, Dr. Goodson. In addition, it would be best if that statement was clear in regard to any overlap of this particular proposal and how it could be managed. The current letter is a bit vague on how "we can make this work".

Thank you!

Sincerely,

Mike

Michael Herman Associate Dean of the Graduate School 103 Fairchild Hall Kansas State University Manhattan, KS 66506 Office (785) 532-6191 Fax (785) 532-2983 mherman@ksu.edu On Apr 4, 2016, at 3:45 PM, Earl <<u>ekbrown@ksu.edu</u>> wrote:

Socorro,

Thank you very much for your response and support.

Mike and Kate, Please find attached Dr. Herrera's response to MLANG's proposed grad certificate in TEFL. Please let me know if there is anything else.

Best, Earl Brown

Earl K. Brown, PhD Associate Professor of Spanish (Linguistics) Director of Graduate Studies Advisor, TEFL MA Program Department of Modern Languages Kansas State University www-personal.ksu.edu/~ekbrown

De: Socorro Herrera Enviado: sábado, abril 02, 2016 5:46 PM Para: Earl Brown Asunto: Re: Proposed new Graduate Certificate

See attached response. Sorry for the delay.

Let's visit soon.

Socorro

From: Earl Brown Sent: Friday, April 1, 2016 10:57 AM To: Socorro Herrera; F Goodson Subject: Re: Proposed new Graduate Certificate

Thank you very much Socorro.

Earl

Earl K. Brown, PhD Associate Professor of Spanish (Linguistics) Director of Graduate Studies Advisor, TEFL MA Program Department of Modern Languages Kansas State University www-personal.ksu.edu/~ekbrown

De: Socorro Herrera Enviado: jueves, marzo 31, 2016 8:41 PM Para: Earl Brown; F Goodson Asunto: Re: Proposed new Graduate Certificate

Hello Earl,

I drafted a response, but have yet to send it. Let me set up an appointment with Dr. Goodson, share my thoughts and then get back to you by Monday.

Socorro

From: Earl Brown Sent: Thursday, March 31, 2016 7:27 PM To: Socorro Herrera; F Goodson Subject: RV: Proposed new Graduate Certificate

Hi Socorro,

I'm emailing to see if you've been able to write an endorsement about our graduate certificate proposal in TEFL. Please see the email conversation below between myself and Mike Herman in the Grad School.

Thanks, Earl Earl K. Brown, PhD Associate Professor of Spanish (Linguistics) Director of Graduate Studies Advisor, TEFL MA Program Department of Modern Languages Kansas State University www-personal.ksu.edu/~ekbrown

De: Michael Herman Enviado: jueves, marzo 31, 2016 1:23 PM Para: Earl Brown Cc: Kate Taylor Asunto: Re: Proposed new Graduate Certificate

Earl,

We have not received anything from Dr. Herrera. Dr. Shanklin thinks that Dr. Goodson is the one that needs to provide the endorsement. This is part of developing the proposal, so you should be the one seeking those endorsements. I would make certain none of the faculty involved in the TESL for Adult Certificate have any issues with this certificate. It will be very important to demonstrate there is not overlap or duplication of your proposed certificate and the existing one.

It won't be possible to have the approvals work through the system to be ready for a Fall 2016 start date.

Mike

On Mar 31, 2016, at 1:15 PM, Earl Brown <<u>ekbrown@ksu.edu</u>> wrote:

Dr. Herman,

When Dr. McGregor and I spoke with Socorro Herrera she mentioned that she would write a response/endorsement to our proposal. I assumed that she would/has sent it directly to the grad school, rather than to me. Have you not received her endorsement yet? Should I remind her or is this something that the Grad School would be better positioned to ask for?

It is too optimistic to hope for a Fall 2016 start date, at this point?

Thanks, Earl Brown

Earl K. Brown, PhD Associate Professor of Spanish (Linguistics) Director of Graduate Studies Advisor, TEFL MA Program Department of Modern Languages Kansas State University www-personal.ksu.edu/~ekbrown

De: Michael Herman Enviado: jueves, marzo 31, 2016 10:58 AM Para: Earl Brown Cc: Kate Taylor Asunto: Re: Proposed new Graduate Certificate

Hi Earl,

We need to make certain that the College of Education agrees that there is not a conflict with their current Teaching English as a Second Language

for Adult Learners Certificate. You need to firm up the endorsements to include relevant Department Head(s). This might be Todd Goodson and/or David Thompson. Dr. Herrera should determine which is appropriate and obtain the necessary endorsements. This should be included in the proposal.

Everything else seems to be in place. I anticipate that the Graduate Council Assessment and Review Committee will have questions about your assessment plan. There might be a concern about the assessment of using the entire MLANG 600 course (i.e. final exam) to asses SLO1. There might also be a question about the rubric used to evaluate the final project in MLANG 710 to assess SLO5.

I'd be happy to look at it again if you'd like. The next steps would be to begin the course and curriculum approval process. This would start with your department, then the college, etc. Once these approvals have occurred it will be taken up by Graduate Council.

Thanks!

On Mar 28, 2016, at 3:50 PM, Earl Brown <<u>ekbrown@ksu.edu</u>> wrote:

Kate and Dr. Herman,

Please find attached a PDF file with my department's graduate certificate proposal with the full assessment plan.

Please let me know if there are any missing parts at this point.

Best, Earl Brown

Earl K. Brown, PhD Associate Professor of Spanish (Linguistics) Director of Graduate Studies Advisor, TEFL MA Program Department of Modern Languages Kansas State University www-personal.ksu.edu/~ekbrown

De: Kate Taylor Enviado: martes, febrero 16, 2016 8:49 AM Para: Earl Brown Asunto: Proposed new Graduate Certificate

Dr. Brown-

Dr. Herman would like a pdf version of the whole proposal, to include any rubrics as well as the full Assessment of Student Learning plan (<u>http://www.k-state.edu/grad/faculty/program-review/New%20Program%20Assessment%20Plan%204-6-15.pdf</u>)

Thank you,

Kate A. Taylor Administrative Specialist Graduate School 103 Fairchild Hall Kansas State Univiersity 785-532-7927 kat0807@ksu.edu

<Proposal\_grad\_cert\_TEFL.pdf>

<Dr. Brown.docx>

# Graduate School Proposed Degree Program or Certificate: Graduate Certificate in Teaching English as a Foreign Language College: Arts and Sciences Assessment of Student Learning Plan

#### A. <u>College, Department, and Date</u> College: Arts and Sciences Department: Modern Languages Date: 23 March 2016

# B. Contact Person(s) for the Assessment Plan

Earl Brown, PhD Associate Professor of Spanish <u>ekbrown@ksu.edu</u>

After Sp17 semester: Mary Copple, PhD Associate Professor of Spanish <u>mcopple@ksu.edu</u>

# C. Name of Proposed Degree Program or Certificate

Graduate Certificate in Teaching English as a Foreign Language

# D. Assessment of Student Learning Three-Year Plan

# 1. Student Learning Outcome(s)

## a. **List (or attach a list) all the student learning outcomes for the program.** Upon completion of the TEFL Graduate Certificate program:

## Knowledge

Students will:

*SLO 1*: Demonstrate knowledge of the ways in which English serves as a system of communication, as well as how it is similar to and different from other languages in the world.

*SLO 2*: Distinguish characteristics of second language learning theories and their application to second language teaching.

# Skills

Students will:

*SLO 3*: Demonstrate knowledge of and apply foreign language pedagogical approaches with adult learners of foreign and second languages.

*SLO 4*: Demonstrate proficient use of academic language in extended discourse, whether spoken or written, in English, regardless of first language of students.

## **Attitudes and Professional Conduct**

Students will:

*SLO 5*: Exhibit an awareness of responsibilities (professional integrity, ethical behavior, ability to work with diverse groups of peoples) and engage in professional conduct towards constituent groups which may include students, faculty, staff, or the public.

# b. Indicate at least three outcomes on the above list that will be assessed by the first mid-cycle review.

*SLO 2*: Distinguish characteristics of second language learning theories and their application to second language teaching.

*SLO 3*: Demonstrate knowledge of and apply foreign language pedagogical approaches with adult learners of foreign and second languages.

*SLO 4*: Demonstrate proficient use of academic language in extended discourse, whether spoken or written, in English, regardless of first language of students.

Specify the rationale for selecting these learning outcomes:

Theories that attempt to describe the process that second and foreign language learners go through is a foundational element of this proposed graduate certificate program. Closely related is the knowledge of techniques that instructors of second and foreign languages need in the classroom. Finally, possessing an ability to use academic language is necessary for English instructors to be successful. For these reasons, SLOs 2, 3, and 4 will be assessed first.

SLO/Required Courses/experiences	Course Number(s)	Course Number(s)	Course Number(s)	Course Number(s)	
Degree program	MLANG 600	MLANG 710	MLANG 770	MLANG 803,	
SLOs				804	
SLO 1	ХА				
SLO 2			ХА	ХА	
SLO 3		Х		ХА	
SLO 4	XA	Х	Х	Х	
SLO 5		ХА			
University SLOs (Graduate Programs)					
Knowledge	ХА	X	ХА	ХА	
Skills	XA	Х	ХА	ХА	
Attitudes and Professional		ХА			
Conduct					

Relationship to K-State Graduate Student Outcomes:

# 2. Assessment Strategies

# a. Direct Measures

**SLO 2** will be assessed in the midterm and final exams of MLANG 770 as well as in the final portfolios of MLANG 803 and MLANG 804. The exams represent a reliable measure of students' knowledge of second language acquisition theories while the portfolios demonstrate how students might apply those theories in the classroom. The exams are attached below in Appendix B.

Based on the artefacts mentioned above, each instructor in MLANG 770, MLANG 803 and MLANG 804 will use the following rubric to report the number of graduate certificate students who follow into each level of proficiency within SLO 2.

	Exemplary	Proficient	Acceptable	Unacceptable
SLO 2: Distinguish characteristics of second language learning theories and their application to second language teaching.	Students demonstrate a high degree of understanding of characteristics of each second language learning theory, can clearly explicate the similarities and differences of different strands of theories, choose and apply appropriate theories to teaching practice.	Students demonstrate understanding of characteristics of each second language learning theory, can explicate the similarities and differences of different strands of theories, and apply the theories to teaching practice.	Students demonstrate a moderate degree of understanding of characteristics of each second language learning theory, can explicate the similarities and differences between some learning theories, and apply some theories to teaching practice.	Students demonstrate a low degree of understanding of characteristics of each second language learning theory, cannot explicate the similarities and differences of different strands of learning theories, nor can they apply the theories to teaching practice.

**SLO 3** will be assessed during the micro-teach demonstrations students make in class as well as during the 15-minute lessons students give several times the semester in an English Language Program class.

Based on the teaching presentations mentioned above, the instructor(s) in MLANG 803 and MLANG 804 (as of the last 8 or more years, the same instructor has taught both these courses) will use the following rubric to

	Exemplary	Proficient	Acceptable	Unacceptable
SLO 3: Demonstrate knowledge of and apply foreign language pedagogical approaches with adult learners of foreign and second languages.	Students demonstrate an outstanding degree of understanding of current pedagogical and adult learning theories and approaches; confirm mastery of their aptitude through analysis and application of learning theories and approaches to and in a classroom setting.	Students demonstrate an overall understanding of current pedagogical and adult learning theories and approaches; confirm competence of their aptitude through analysis and application of learning theories and approaches to and in a classroom setting.	Students demonstrate a moderate degree of understanding of current pedagogical and adult learning theories and approaches; able to confirm some aptitude through analysis and application of learning theories and approaches to and in a classroom setting.	Students demonstrate a low degree of understanding of current pedagogical and adult learning theories and approaches; unable to confirm their aptitude through analysis and application of learning theories and approaches to and in a classroom setting.

report the number of graduate certificate students falling into each of the proficiency levels within SLO 3:

**SLO 4** will be assessed in the final written paper and accompanying conference-style oral presentation during the last week of MLANG 600. The rubric used to assess student performance during the oral presentation is attached in Appendix B.

Based on the above-mentioned artefacts, the instructor of MLANG 600 will use the following rubric to report the number of graduate certificate students falling into each level of proficiency:

	Exemplary	Proficient	Acceptable	Unacceptable
<b>SLO 4</b> :	Students show a	Students show	Students can	Students
Demonstrate	native or native-	an advanced	communicate in	communicate with
proficient use	like	management of	the English	difficulty in the
of academic	management of	the English	language, both	English language,
language in	the English	language, both	orally and in	both orally and in

extended language, both orally and in whether written contexts. spoken or Additionally, written, in English, reflects a wide regardless of first language of students. scholarly lexicon related to language acquisition and instruction.	orally and in written contexts. In addition, their production reflects an overall high knowledge of scholarly lexicon related to language acquisition and instruction.	written contexts, although with a few errors that reflect interference of their first language (if not English). They use a moderate degree of scholarly lexicon.	written contexts. Their communications are highly obscured by inaccuracies caused by the interference of their first language (if not English). In addition, their scholarly lexicon is very limited.
---	--	--	--

It should be noted the level of proficiency on each of these three rubrics that will be considered acceptable by the TEFL Advisory Committee is "Acceptable" or better. Further, it should be noted that all the instructors of these courses (MLANG 600, 770, 803, 804) are on the TEFL Advisory Committee.

## b. Indirect Measures

At this time, no indirect measures figure into the assessment of these first three SLOs, rather, only direct measures of student work and performance, as noted above.

# c. Number of students included in the assessment

As the number of students in the proposed graduate certificate is expected to be small, all student work and performance will be assessed for this program.

## d. Timetable

The data to assess the level of proficiency of the students in each SLO will be collected each semester for the first three years. As the data comes from assignments and assessments in specific courses, the data will be collected at the times during each semester in which those specific assignments are due and when the assessments are administered. The professors of the various courses will collect the data and enter the score on each assignment or assessment in a password-protected private Google spreadsheet that the TEFL Advisor will have access to.

# 3. Results and Review of Student Learning Outcomes and Assessment Strategies

a. Describe the process the faculty will follow to review the results of assessment data.

After each semester, the TEFL Advisor will prepare a summary of the results of the previous semester's data collection efforts and present these results to the TEFL Committee during its semesterly meeting. Recommendations for remedying any deficiencies in level of proficiency of the SLOs proposed to be reviewed will be discussed and recommendations will be shared with the instructors of the courses in which there are deficiencies in a particular SLO. It should be noted that all of the instructors for the five courses in which the SLOs are taught and assessed are also members of the TEFL Committee.

b. Describe any other program improvement procedures that will be followed (e.g. formative assessments of delivery method, corporate or employer surveys).

NA

**Appendix A: Alignment Matrix** Pasted above in Section D.1.b.

## Appendix B: Rubrics, Surveys, Other documentation

Attached below.

\_\_ / 75 pts

Name: \_\_\_\_\_ MLANG 770 Theories of SLA Midterm exam

# Instructions:

There are three sections in this exam. Students will have one class period (75 minutes) to complete the exam. Suggested time allocation: Section 1 = 10 minutes, Section 2 = 40 minutes, Section 3 = 25 minutes.

# Section 1: Key terms (10 pts)

Match the term in column A with its corresponding description in Column B. Four (4) options in Column B will **not** be used.

- A

   1. competence

   2. controlled processing

   3. intake

   4. language faculty

   5. modularity

   6. nurture

   7. parameters

   8. poverty-of-the-stimulus
- 9. property theory
- 10. transfer

B

- A. a learner's need for conscious attention to a form
- B. a speaker's linguistic production
- C. a speaker's underlying knowledge of linguistic system
- D. a theory that models the developmental process of the language system
- E. a theory that models the nature of the language system
- F. an innate language module in the brain
- G. information that a learner actually processes from available input
- H. language-specific values assigned to universal structural elements
- I. the idea that environmental input is insufficient to explain acquisition of language system
- J. the idea that L1 structures and routines influence L2 performance
- K. the idea that the brain has distinctive mechanisms related to different types of knowledge
- L. the view that humans have an innate predisposition to learn language
- M. the view that language learning is driven by environmental factors
- N. universal structural elements that control the shape of human languages

# Section 2: Observations on language learning (40 pts)

Choose **two** (2) of the following three observations about language learning, and **briefly** describe how the listed approaches account for (i.e. explain) or do **not** account for the observation. Write your responses on a separate piece of paper, clearly identifying each response.

Observation 1: When learning their L1, children produce forms and utterances that they have never heard before.

- Behaviorism
- Universal Grammar
- Connectionism

Observation 2: Although learners have been taught or have been exposed to particular forms, they may not use them correctly in their own production.

- Skill Acquisition Theory
- Processability Theory
- Exemplar Theory

Observation 3: Some features of a language are more difficult (i.e. take longer) for L2 learners to acquire.

- Contrastive Analysis
- Competition Model
- Error Analysis

# Section 3: Essay (25 pts)

Choose **one** (1) of the following three essays and write a well-argued response. Students should keep the time limitations in mind and hit the most crucial points. It is not expected that students write everything they know, but rather the points that most clearly support their argument. Write your essay on a separate piece of paper.

Essay 1: Some researchers argue that the language-learning process is essentially the process of recognizing patterns in input and organizing and assigning meaning to those patterns. What theories are **most** useful in accounting for this perspective (and why)? What theories are **least** useful in accounting for this perspective?

Essay 2: What is interlanguage? What theories explain how it evolves (both internally and externally)? What types of internal and external changes may occur in interlanguage development?

Essay 3: How are systematicity and variability connected to creativity and routine? In your opinion, what theory most clearly accounts for these four characteristics of language use? How does that theory explain these four concepts?

\_\_\_\_\_/ 75 pts

Name: \_\_\_\_\_ MLANG 770 Theories of SLA Final exam

## Instructions:

There are three sections in this exam. Students will have one hour and fifty minutes to complete the exam. Suggested time allocation: Section 1 = 15 minutes, Section 2 = 45 minutes, Section 3 = 40 minutes, review answers = 10 minutes.

# Section 1: Key terms (10 pts)

Match the term in column A with its corresponding description in Column B. Four options in Column B will **not** be used.

Α	В
1. perceptual saliency	A. an area of potential development where a learner can only achieve his potential with the help of an expert
2. scaffolding 3. private speech	B. verbal guidance provided by an expert to a learner that allows the learner to express more complex thoughts than he could do alone
4. foreigner talk	C. complete withdrawal from second language interaction and a re-assertion of first language identity
5. negative evidence	D. correction of a non-native L2 utterance
6. interpersonal competence	E. guided behavior via collaborative talk, typical of children F. self-talk primarily used by adults to regulate behavior,
7. self-regulation	emotions, and thoughts
8. inner speech	G. the part of a person's identity that results from his membership in a social group
9. appropriation	H. self-talk often used by children to experiment with language and rehearse social situations
10. social identity	I. speech characterized by terms that describe language itself J. speech characterized by slower rate, stressed key words, louder volume, and careful articulation
	K. term used to describe the adoption of knowledge into one's consciousness, generally involving a shift from inter- mental to intra-mental activity
	L. the idea that learning of a linguistic feature occurs as that particular feature becomes accessible in input (i.e. convertible to intake) to the learner.
	M. knowledge required in order to use L2 in face-to-face communicative settings
	N. autonomous functioning characteristic of mature adults

# Section 2: Observations on language learning (40 pts)

Choose **two** of the following three observations about language learning, and **briefly** describe how the listed approaches account for (i.e. explain) or do **not** account for the observation. Students should write their responses on a separate piece of paper, clearly identifying each response.

Observation 1: Language features (e.g. past tense) tend to develop in stages in L2 learners' speech.

- Universal Grammar
- Skill Acquisition Theory
- A meaning-based (or functionalist) approach

Observation 2: People tend to speak in a similar fashion to those around them.

- Socioculturalism
- Sociolinguistics
- Exemplar Theory

Observation 3: Most L2 learners do not achieve native-like proficiency while all L1 learners do.

- Connectionism
- Universal Grammar
- Interactionism

# Section 3: Essay (25 pts)

Choose one of the following three essays and write a well-argued response.

Hint: Students should keep the time limitations in mind and hit the most crucial points. It is not expected that students write everything they know, but rather the points that most clearly support their argument. Students should write their essay on a separate piece of paper.

Essay 1: Learner language is studied using many types of data (think of the research that you read for your research proposal, the research shared by your classmates in their presentations and the studies we have discussed in class). Choose three data collection methods and discuss the benefits and limitations of each method.

Essay 2: One focus of linguistic research is language <u>use</u> (by both learners and native speakers). What are important aspects of natural language use (both structural and interactional features) and why is it important to study language use? How does this research help us <u>as researchers</u> understand the SLL process?

Essay 3: Second Language Learning (SLL) is multi-faceted and no one theory represents every part of the process. Yet complementary theories exist that could, if combined, explain the following primary aspects of the SLL process:

- a. Representation of language in the brain
- b. Input processing
- c. Interaction and social context

Select the theories that you find most convincing (and that are complementary) and discuss how together they explain the three points above.

# MA TEF/L Practicum: MLANG 803/804 Peer Teaching Rubric Dr. Abby Franchitti

Name			Date Sk	ill	Level	
	Outstanding	Professional	Adequate	Needs improvement	Ineffective	Comments
Organization	_ Instructor has a specific visible objective _ Instructor paces sequence(activity) well _ Timing of activity[(ies] is effective.	_ Instructor has a clear objective _ Instructor paces sequence _ Timing of activity[(ies] generally effective.	_ Instructor has an unarticulated objective _ Instructor shows some effort in pacing sequence _ Timing of activity[(ies] somewhat effective.	Instructor's objective is neither specific nor visible Instructor's pacing of sequence is uncertain Timing of activity[(ies] is often ineffective.	_ Instructor has no specific or visible objective _ Instructor does not pace sequence well _Timing of activity[(ies] is ineffective	
Planning	_Instructor has an obvious plan _Activity meets all targeted class objectives _Activity is very well adapted to level of class _Instructor clearly relates activity to current lesson and/or to previously learned material	_ Instructor has a plan _ Activity meets most of the targeted objectives _ Activity is adapted to level of class _ Instructor relates activity to current lesson and/or to previously learned material	_ Instructor has a partial plan _ Activity meets some of the targeted objectives _ Activity is adapted to level of class to a certain degree _ Instructor relates activity to a certain degree to current lesson and/or to previously learned material	Instructor's plan is unclear or incomplete Activity meets part of the objectives Activity is not quite adapted to level of class Instructor's choice of activity is not quite related to current lesson and/or to previously learned material.	<ul> <li>Instructor has no plan</li> <li>Activity has not met or targeted the objectives</li> <li>Activity is not adapted to level of class</li> <li>Instructor does not relate activity to current lesson and/or to previously learned material</li> </ul>	
Teacher/Partici pant Interaction	_ Instructor offers an ample variety of interaction opportunities (small group, whole class, etc Participants: had ample opportunity to speak were always called on in a varied manner _Communication patterns were varied and well thought through _Responses to errors are always appropriate	_ Instructor offers a variety of communication/ interaction types (small group, whole class, etc.) Participants: had frequent opportunity to speak were usually called on in a varied manner _Communication patterns were often varied _Responses to errors are appropriate	_ Instructor offers some opportunities for different types of interaction (small group, whole class, etc.) Participants: had occasional opportunities to speak were sometimes called on in a varied manner _Communication patterns were varied to some degree _Responses to errors are sometimes appropriate	Instructor offers limited opportunities for communication /interaction (small group, whole class, etc.) Participants: had rare opportunities to speak were seldom called on in a varied manner Communication patterns were rarely varied Responses to errors are rarely appropriate	_ Instructor does not employ various types (small group, whole class, etc.) Participants: had almost no opportunity to speak were not called on in a varied manner _Communication patterns were not varied _Responses to errors are not appropriate	

	Outstanding	Professional	Adequate	Needs improvement	Ineffective	Comments
Use of English	_ Instructor models authentic language use (contextualized and natural) _ Instructor uses appropriate language (Register; level)	_ Instructor models authentic language use (not all is contextualized and natural) _ Instructor uses appropriate language most of the time (Register; level)	_ Instructor models somewhat authentic language use (sometimes contextualized and natural) _ Instructor uses appropriate language part of the time(Register; level)	_ Instructor rarely models authentic language (rarely contextualized or natural) _ Instructor rarely uses appropriate language (Register; level)	_ Instructor does not model authentic language or language is not contextualized or natural _ Instructor does not use appropriate language (Register; level)	
Clarity of explanation	_Introduces activity effectively and innovatively _Instructor continually models vocabulary/structures to be studied	_Introduces activity appropriately _Instructor often models vocabulary/structures to be studied	_ Introduces activity somewhat appropriately _ Instructor sometimes models vocabulary/structures to be studied	_ Introduces activity _ Instructor rarely models vocabulary/structures to be studied	_ Does not introduce activity _ Instructor never models vocabulary/structures to be studied	
Non-verbal communication:	_ Eye contact	_ Eye contact	_ Eye contact	_ Eye contact	_ Eye contact	
	_ Voice level	_ Voice level	_ Voice level	_ Voice level	_ Voice level Total:	

Description of Activity:

#### MLANG 803/4

Practicum in Oral and Written Communication

Semester\_ \_\_\_\_20\_\_\_\_\_

Portfolio: Name

score\_\_\_

/25

Category	5	4	3-2	1
Choice of contents when appropriate /	The collection of material shows visible understanding of conceptual framework.	The collection of material shows some understanding of conceptual framework.	The collection of material shows little visible understanding of conceptual framework.	The collection of material shows no visible understanding of conceptual framework.
Required Components Each element contained is thoroughly developed and explained.	Response includes all components and meets or exceeds all requirements indicated in the instructions. Each question or part of the assignment is addressed thoroughly. All attachments and/or additional documents are included, as required.	Response includes all components and meets all requirements indicated in the instructions. Each question or part of the assignment is addressed. All attachments and/or additional documents are included, as required.	Response is missing some components and/or does not fully meet the requirements indicated in the instructions. Some questions or parts of the assignment are not addressed. Some attachments and additional documents, if required, are missing or unsuitable for the purpose of the assignment.	Response excludes essential components and/or does not address the requirements indicated in the instructions. Many parts of the assignment are addressed minimally, inadequately, and/or not at all.
Presentation/Organization:	The presentation is done in a very logical pedagogical fashion with overall description of pertinence and contextualization.	The presentation is done in a rather logical pedagogical fashion with a description of pertinence and contextualization.	The presentation is done in a somewhat logical pedagogical fashion with some description of pertinence and contextualization.	The presentation is not done in a logical pedagogical fashion. There is little, if any description of pertinence and contextualization.
Professional terminology:	The appropriate terminology and professional vocabulary is used throughout	The appropriate terminology and professional vocabulary is often used.	The appropriate terminology and professional vocabulary is sometimes used.	The appropriate terminology and professional vocabulary is rarely used.

#### MLANG 803/4 Pra

Semester\_\_\_\_20\_\_

Journal :	The entries are made on a	The entries are made on a	The entries are made on an	The entries are rarely
	regular basis.	fairly regular basis.	irregular basis.	made.
/(2)	The entries contain	The entries contain some	The entries contain little	The entries contain no
	analyses and summaries of	analyses and summaries of	analyses and few	analyses and few
	readings and discussions.	material read and	summaries of material	summaries of material
	The writing shows	discussed.	read and discussed.	read and discussed.
	professional engagement.	The writing shows some	The writing shows limited	The writing shows no
		professional engagement.	professional engagement.	professional engagement.
Reflection paper:				
See specific rubric				

Grading scale:

22 - 25 = A

18 - 21 = B

14 - 17 = C

< 13 = D

Comments:

Portfolio: Name

# MLANG 600 – Presentations Assessment Rubric

Name:	Group:
Group Performance	
Quality of abstract (Final Draft) (5)	
Organization and selection of materials (7)	
Preparation (incl. practice) (5)	
Individual Performance	
Time Management (5)	
Clarity of Expression (8)	
Level of Involvement with Audience (5)	

# MLANG 600 – Presentations Assessment Rubric

Name:	Group:
Group Performance	
Quality of abstract (Final Draft) (5)	
Organization and selection of materials (7)	
Preparation (incl. practice) (5)	
Individual Performance	
Time Management (5)	
Clarity of Expression (8)	
Level of Involvement with Audience (5)	

# MLANG 600 – Literature Review

Group:	Exemplary	Proficient	Acceptable	Unacceptable
Introduction of problem/thesis	Problem/thesis formed through the lit review is clearly stated.	Problem/thesis formed through the lit review.	Problem/thesis not made explicitly clear in lit review.	Problem/thesis not formed and not apparent in lit review.
Organization	Well organized, demonstrates logical sequencing and structure. Excellent use of transitions.	Well organized, demonstrates mostly logical sequencing and structure. Includes transitions.	Weakly organized, with no logical sequencing or structure. Few transitions.	No organization, sequencing, or structure. No transitions.
Writing Style	Writing is crisp, clear, and succinct. Meaning is explicit due to the inclusion of many concrete examples.	Writing is generally clear. Some concrete examples used. Paragraph or sentence structure may be repetitive.	Writing is somewhat clear, but unnecessary words are used. Few concrete examples used. Paragraph/sentence structure repetitive.	Writing is unclear. No concrete examples used.
Conclusions/Reflections	Succinct/precise conclusions based on the review made. Problem/ thesis strongly supported. Reflections are detailed and appropriately linked to results.	Conclusions made based on the review. Problem/ thesis supported. Reflections are appropriately linked to results, but lacking in some detail.	Some conclusions based on the review made. Problem/thesis only weakly supported. Reflections are linked to results somewhat.	Conclusions are not made. Problem/thesis not supported. Reflections not linked to results.
Reference List	Information is cited appropriately using APA format.	Information is cited using APA format, but with a few errors.	Information is cited with many errors, or list is incomplete	Information is not cited or not included.