Academic Program Approval Voting Record

This document is to be appended as the last page of the proposal for any new or revised academic program to record the successive votes of approval as the proposal moves through its required review and approval steps. Consult Faculty Handbook Section 10.8 or the Faculty Senate Curriculum Committee website for information regarding Committee review and voting requirements for each action.

Curricular Action: (check appropriate boxes below)
1. X New Program  □ Name Change  □ Discontinuation  □ Concurrent Degree for:
2. □ Undergraduate Major  □ Graduate Major  □ Undergraduate Minor  □ Graduate Minor
   □ Undergraduate Certificate  X Graduate Certificate  □ Other: ________________________
3. Name of Proposed Change: Graduate Certificate in Postsecondary Teaching
4. Name of Contact Person: Ann Gansemer-Topf  e-mail address: anngt@iastate.edu
5. Primary College: College of Human Sciences  Secondary College: ________________________
6. Involved Department(s): School of Education
   ________________________  ________________________

Voting record for this curricular action:

<table>
<thead>
<tr>
<th>Voting Body</th>
<th>Votes</th>
<th>Date of Vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dept. or Program Committee</td>
<td>For 22</td>
<td>Against 2</td>
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<tr>
<td></td>
<td>Abstain</td>
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<tr>
<td>College Curriculum Committee</td>
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<tr>
<td>College Approval Vote</td>
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<tr>
<td>Graduate Council</td>
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<td>Faculty Senate Curriculum Committee</td>
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<tr>
<td>Faculty Senate Academic Affairs Council</td>
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<td>Faculty Senate</td>
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</table>
Graduate Certificate in Postsecondary Teaching Overview

The Graduate Certificate in Postsecondary Teaching aims to enhance the professional development of graduate students who want to become effective postsecondary teachers/instructors. The certificate provides teaching knowledge and experience for graduate students across the university. Building off the success of the Preparing Future Faculty program, the certificate affords the opportunity to gain relevant experience for graduate students pursuing faculty positions at all institutional types. The proposed certificate will replace two existing graduate certificates. The Graduate Student Teaching Certificate has been administered by the Center for Excellence in Learning and Teaching, in conjunction with the Preparing Future Faculty program. The School of Education offers a Community College Teaching Certificate. The School of Education, in collaboration with colleagues in CELT, is requesting a graduate certificate that has a broader focus on postsecondary education and meets the combined needs of the two existing (and to be discontinued) certificates

[FSCC – November 2013]
Establishing a Graduate Certificate Program

The first step in establishing a new graduate certificate is the preparation of a proposal by qualified group of faculty. If the proposed program will be focused in an existing department, program or college, the proposal should be routed through the corresponding curriculum committees. College curriculum committees will forward the appropriately amended proposal to the Graduate College Catalog and Curriculum Committee. Proposals for interdisciplinary programs with no obvious departmental or college focus shall be submitted directly to the Graduate College Catalog and Curriculum Committee.

The proposal will be reviewed by the Graduate Curriculum and Catalog Committee, by the Graduate Council, by the Graduate Dean, and by the Provost.

The following information should be included in the proposal:

1. Name of the proposed graduate certificate.
   
   *Graduate Certificate in Postsecondary Teaching*

2. Name of the departments and/or programs involved.
   
   *School of Education*

3. Name of the contact person.
   
   Ann Gansemer-Topf
   anngt@iastate.edu

4. Need for the graduate certificate.
   
   *The proposed certificate will replace two existing graduate certificates. The Graduate Student Teaching Certificate has been administered by the Center for Excellence in Learning and Teaching, in conjunction with the Preparing Future Faculty program. The School of Education offers a Community College Teaching Certificate. The School of Education, in collaboration with colleagues in CELT, is requesting a graduate certificate that has a broader focus on postsecondary education and meets the combined needs of the two existing (and to be discontinued) certificates. The School of Education has faculty members who are involved in the scholarship of teaching and learning and has added faculty members in the learning sciences area. Therefore, it is positioned to provide the required courses for the certificate and the administrative support for promoting and overseeing the certificate. The Center for Excellence in Learning and Teaching will continue to provide the four Preparing Future Faculty courses as elective courses within the certificate.*

5. Objective of the graduate certificate.
   
   *The Graduate Certificate in Postsecondary Teaching aims to enhance the professional development of graduate students who want to become effective postsecondary*
teachers/instructors. The certificate provides teaching knowledge and experience for graduate students across the university. Building off the success of the Preparing Future Faculty program, the certificate affords the opportunity to gain relevant experience for graduate students pursuing faculty positions at all institutional types.

6. General description of the graduate certificate.

The graduate certificate is a 12 credit certificate that requires coursework in learning theories, methods, and a teaching practicum. This graduate certificate supplements graduate students’ training, preparing students to teach in postsecondary institutions.

7. Graduate certificate requirements including:

a. Admission standards and prerequisites for the certificate program.

To participate in the Graduate Certificate in Postsecondary Teaching program, you must already have a graduate degree or be admitted to a graduate program at ISU, where you have completed at least 9 credit hours.

b. Courses and seminars*

Required Courses

- HG ED 561, College Teaching

Minimum of 3 credits of a teaching methodology course. Options include:

- AGEDS 520, Instructional Methods for Adult and Higher Education in Ag Ed
- EDUC 533, Learning Theories
- Chemistry 555, Teaching College Chemistry
- English 500, Teaching Multimodal Composition
- Psychology 633, Teaching of Psychology
- V PTH 530, Teaching and Learning in Veterinary Medical Education
- Other teaching methodology course approved by GCPE administrator

Minimum of 3 credits of an approved teaching practicum

- Gr St 587: PFF Teaching Practicum supervised by PFF staff and departmental faculty mentor (requires admission to the PFF program)
- Other post-secondary teaching practicum offered at ISU (i.e., XXXX 590).

Minimum of 3 credits of an elective course

- Gr St 585: Preparing Future Faculty Introductory Seminar
- Gr St 586: Preparing Future Faculty Intermediate Seminar
- Gr St 588: Preparing Future Faculty Special Topics
- See Appendix for a list of possible courses. Other courses not on this list but with a focus on post-secondary learning and teaching will be considered by the director of certificate for approval on the program of study.

8. General description of the resources currently available and future resource needs:

a. A list of supporting faculty members including a brief description of their expertise relating to the graduate certificate.

Dr. Alyssa Emery in the School of Education has expertise in learning sciences. Several faculty in the SOE have expertise in curriculum and teaching methods. CELT faculty

http://www.grad-college.iastate.edu/forms/files/certificateprogram.doc GC 5/17
and staff with over 20 years of experience with the Preparing Future Faculty Program will continue to provide support for the Preparing Future Faculty elements of the certificate.

b. The effects of any new courses on faculty workload. We are not proposing to add additional courses. Current faculty in the School of Education will support the certificate program through course offerings and administration. CELT will continue to offer promotion of the certificate and teach the Preparing Future Faculty courses that are electives in the certificate. No additional resources will be required.

c. Other resources required for the program including graduate assistants, laboratories and other facilities, supplies, etc.

N/A

9. Relationship of the proposed graduate certificate to the strategic plans of the department, college, and the university.

The graduate certificate aligns with Iowa State’s Strategic Plan Subgoal 1.3 to provide learning opportunities to prepare students for life and careers in a dynamic, global community and Subgoal 1.4 to continue efforts to provide an exceptionally high value educational experience, and Subgoal 1.5 grow the impact and scope of our graduate programs. The certificate aligns with the College of Human Sciences’ mission of providing innovation in education and designing infrastructure leading to enhanced learning. It closely aligns with the SOE’s focus on excellence in teaching and learning.


The certificate will be formally reviewed as a part of the School of Education program review.

Note: Certificate-only students are not eligible for Federal Financial Aid unless the Certificate Program applies for approval to participate. If interested, contact the Student Financial Aid Office. Certificates that apply go through an application process requiring an agreement to follow the annual reporting and disclosure requirements, as set forth by the DOE under Gainful Employment federal regulations.
## Appendix

### New Graduate Certificate in Postsecondary Education Electives List

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A ECL 573</td>
<td>Techniques for Biology Teaching.</td>
</tr>
<tr>
<td>A ECL 573A</td>
<td>Techniques for Biology Teaching: Animal Biology.</td>
</tr>
<tr>
<td>A ECL 573G</td>
<td>Techniques for Biology Teaching: Limnology.</td>
</tr>
<tr>
<td>A ECL 573I</td>
<td>Techniques for Biology Teaching: Insect Ecology.</td>
</tr>
<tr>
<td>A ECL 573W</td>
<td>Techniques for Biology Teaching: Project WET.</td>
</tr>
<tr>
<td>A ECL 698</td>
<td>Animal Ecology Teaching Practicum.</td>
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<tr>
<td>AESHM 670</td>
<td>Teaching Practicum</td>
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<tr>
<td>AGEDS 501</td>
<td>Planning Agriculture and Life Sciences Education Programs.</td>
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<tr>
<td>AGEDS 502</td>
<td>Methods of Teaching in Agriculture and Life Sciences.</td>
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<tr>
<td>AGEDS 520</td>
<td>Instructional Methods for Adult and Higher Education in Agriculture and Natural Resources.</td>
</tr>
<tr>
<td>AGEDS 533</td>
<td>Introduction to Learning Theory in Agricultural Education.</td>
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<tr>
<td>AGEDS 590A</td>
<td>Curriculum.</td>
</tr>
<tr>
<td>AGEDS 590I</td>
<td>Instructional Technology.</td>
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<tr>
<td>AGEDS 593A</td>
<td>Curriculum.</td>
</tr>
<tr>
<td>AGEDS 593H</td>
<td>Instructional Technology.</td>
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<tr>
<td>AGRON 698</td>
<td>Agronomy Teaching Practicum.</td>
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<tr>
<td>AN S 590L</td>
<td>Special Topics: Teaching.</td>
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<tr>
<td>CHEM 555</td>
<td>Teaching College Chemistry.</td>
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<tr>
<td>DIET 534</td>
<td>Nutrition Education in the Community.</td>
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<tr>
<td>EDADM 558</td>
<td>Diverse Learning Needs.</td>
</tr>
<tr>
<td>EDUC 501</td>
<td>Foundations of Educational Technology.</td>
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<tr>
<td>EDUC 503</td>
<td>Designing Effective Learning Environments.</td>
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<tr>
<td>EDUC 505</td>
<td>Using Technology in Learning and Teaching.</td>
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<tr>
<td>EDUC 506</td>
<td>Social Justice Education and Teaching: Advanced</td>
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<tr>
<td>EDUC 507</td>
<td>Principles and Practices of Distance Learning.</td>
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<tr>
<td>EDUC 514</td>
<td>Introduction to Science Teaching and Learning</td>
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<tr>
<td>EDUC 516</td>
<td>Antiracist Curriculum Development and Implementation.</td>
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<tr>
<td>EDUC 518</td>
<td>Secondary Science Methods I:</td>
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<tr>
<td>EDUC 533</td>
<td>Theories of Learning</td>
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<tr>
<td>EDUC 541</td>
<td>How People Learn: Implications for Teaching Science and Mathematics</td>
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<tr>
<td>EDUC 546</td>
<td>Advanced Pedagogy in Science Education.</td>
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<td>EDUC 547</td>
<td>Nature of Science.</td>
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<td>EDUC 548</td>
<td>Restructuring Science Activities.</td>
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<td>EDUC 578</td>
<td>Pedagogy, Equality of Opportunity, and the Education of Blacks in the US</td>
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<tr>
<td>EEOB 573B</td>
<td>Techniques for Biology Teaching: Plant Biology</td>
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<td>EEOB 573C</td>
<td>Techniques for Biology Teaching: Fungi and Lichens</td>
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<tr>
<td>EEOB 573D</td>
<td>Techniques for Biology Teaching: Aquatic Ecology</td>
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<td>EEOB 573E</td>
<td>Techniques for Biology Teaching: Prairie Ecology</td>
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<td>EEOB 573F</td>
<td>Techniques for Biology Teaching: Wetland Ecology</td>
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<td>EEOB 573J</td>
<td>Techniques for Biology Teaching: Biology of Invertebrates</td>
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<td>EEOB 573K</td>
<td>Techniques for Biology Teaching: Non-invasive Use of Living Organisms.</td>
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<td>ENGL 521</td>
<td>Teaching of Literature and the Literature Curriculum.</td>
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<td>ENGL 526</td>
<td>Computer-Assisted Language Learning.</td>
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<td>ENGL 528</td>
<td>English for Specific Purposes.</td>
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<td>ENGL 558</td>
<td>Teaching Creative Writing.</td>
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<td>ENGL 559</td>
<td>Creative Writing Teaching Internship.</td>
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<tr>
<td>ENGL 588</td>
<td>Supervised Practice Teaching in Teaching English as a Second Language.</td>
</tr>
<tr>
<td>ENGL 590B</td>
<td>Special Topics: Teaching English as a Second Language (TESL)/Applied Linguistics.</td>
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<tr>
<td>ENT 590K</td>
<td>Special Topics: Teaching Experience.</td>
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<tr>
<td>GR ST 570</td>
<td>Teaching Practices.</td>
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<td>HD FS 691A</td>
<td>Internship: College Teaching.</td>
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<td>HG ED 504</td>
<td>History of Higher Education in the United States</td>
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<td>HG ED 561</td>
<td>College Teaching.</td>
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<td>HG ED 562</td>
<td>Curriculum Development in Colleges.</td>
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<td>HG ED 576</td>
<td>Student Development in Higher Education.</td>
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<td>HG ED 577</td>
<td>Campus Environments and Cultures.</td>
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<td>HG ED 578</td>
<td>Students in U.S. Higher Education</td>
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<td>HG ED 580I</td>
<td>Current Topics in Community Colleges: Learning and Teaching.</td>
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<td>HG ED 582</td>
<td>The Comprehensive Community College</td>
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<td>HG ED 666</td>
<td>Academic Issues and Cultures</td>
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<td>HORT 698</td>
<td>Horticulture Teaching Practicum.</td>
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<td>JL MC 598</td>
<td>Seminars in Mass Communication</td>
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<td>KIN 592</td>
<td>Practicum in College Teaching.</td>
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<td>MATH 591</td>
<td>Orientation for Mathematics Graduate Students I.</td>
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<td>MATH 592</td>
<td>Orientation for Mathematics Graduate Students II.</td>
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<td>NREM 598</td>
<td>Natural Resource Ecology and Management Teaching Practicum.</td>
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<tr>
<td>NREM 698</td>
<td>Natural Resource Ecology and Management Teaching Practicum.</td>
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<td>PHYS 501</td>
<td>Oral Communication of Physics Seminar.</td>
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<td>Special Topics: Teaching Preparation.</td>
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<td>PSYCH 533</td>
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<td>PSYCH 633</td>
<td>Teaching of Psychology.</td>
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<td>PSYCH 691T</td>
<td>Practicum in Psychology: Teaching.</td>
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<td>SP CM 513</td>
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<td>TSM 652</td>
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<td>Curriculum Development in Technology and Engineering.</td>
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<td>TSM 694</td>
<td>Teaching Practicum.</td>
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<td>V PTH</td>
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</table>
A ECL 573. Techniques for Biology Teaching.
(Cross-listed with EEOB, IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

A ECL 573A. Techniques for Biology Teaching: Animal Biology.
(Cross-listed with EEOB, IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

A ECL 573G. Techniques for Biology Teaching: Limnology.
(Cross-listed with EEOB, IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

A ECL 573I. Techniques for Biology Teaching: Insect Ecology.
(Cross-listed with EEOB, IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

A ECL 573W. Techniques for Biology Teaching: Project WET.
(Cross-listed with EEOB, IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

Cr. 1-3. Repeatable. F.S.SS. Prereq: Graduate classification in animal ecology and permission of instructor
Graduate student experience in the animal ecology teaching program. Offered on a satisfactory-fail basis only.

AESHM 670: Teaching Practicum
Cr. 1-3. Repeatable. F.S.SS. Prereq: Six graduate credits and permission of instructor
Supervised experience in the university classroom.
AGEDS 501. Planning Agriculture and Life Sciences Education Programs.  
(Dual-listed with AGEDS 401). (3-0) Cr. 3. F. Prereq: AGEDS 310  
Responsibilities of an agricultural education teacher, curriculum development,  
experiential learning opportunities including FFA and SAE, and assessment and  
maintenance of program quality.

AGEDS 502. Methods of Teaching in Agricultural Sciences/Agribusiness.  
(Dual-listed with 402.) (3-0) Cr. 3. S. Prereq: 401. Topics include principles of teaching and learning, individualized and  
group methods, application of learning, instructional management, special populations, and evaluation.

AGEDS 520. Instructional Methods for Teaching in Agricultural Education.  
(3-0) Cr. 3. Alt. F., offered 2006. Prereq: Graduate classification. Preparation of graduate students to become college or university instructors. Addresses the principles of teaching and learning as they influence teaching activities; psychological aspects of learning, developing teaching plans; laboratory teaching; evaluating student learning; motivating students; examining personal teaching behaviors that influence learning, and choosing appropriate teaching methods.

AGEDS 533. Introduction to Learning Theory in Agricultural Education.  
(3-0) Cr. 3. S. Prereq: Graduate classification  
Introduction to a variety of theoretical perspectives of learning and how they may be used within the  
context of agricultural education. Emphasis will be on the major domains of learning, developmental  
considerations, basic assumptions, concepts, and principles of various learning theories; understanding  
how each theoretical perspective may be used in both formal and non-formal educational settings.

AGEDS 590A. Curriculum.  
Cr. 1-3. Repeatable. F.S.SS. Prereq: 12 credits in agricultural education

AGEDS 590I. Instructional Technology.  
Cr. 1-3. Repeatable. F.S.SS. Prereq: 12 credits in agricultural education

AGEDS 593A. Curriculum.  
Cr. 1-3. Repeatable. F.S.SS. Prereq: 12 credits in agricultural education

AGEDS 593H. Instructional Technology.  
Cr. 1-3. Repeatable. F.S.SS. Prereq: 12 credits in agricultural education

AGRON 698. Agronomy Teaching Practicum.  
Cr. 1-2. Repeatable. F.S.SS. Prereq: Graduate classification in agronomy and  
permission of instructor  
Graduate student experience in the agronomy teaching program. Offered on a  
satisfactory-fail basis only.

AN S 590L. Special Topics: Teaching.  
Cr. 1-3. Repeatable. F.S.SS. Prereq: Permission of instructor  
Special topics in the animal sciences, offered on demand and may be conducted by  
guest professors.

(2-0) Cr. 2. Alt. S., offered 2007. Methods of instruction, strategies  
and techniques for effective teaching and learning along with practice teaching in undergraduate  
chemistry recitation and laboratory courses. Cooperative learning, guided-inquiry, learning cycles,
conceptual change, models and modeling, concept maps, visualization, computer simulations, web-based delivery systems, and learning theories.

**DIET 534. Nutrition Education in the Community.**

(3-0) Cr. 3. SS. Prereq: enrollment in GP-IDEA MFCS in Dietetics
Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education. www only.

EDADM 558. Diverse Learning Needs.  (3-0) Cr. 3. F.S.SS. Prereq: EDADM 541
Learner needs will be examined from major psycho/social perspectives with stress upon developmental phases of normal growth along with common problems encountered in schools. Issues of racism, gender bias, and socio-economic problems that influence learner responsiveness to school curricula and administrative regulations, routines, and legal requirements.


EDUC 503. Designing Effective Learning Environments.  (3-0) Cr. 3. F. Prereq: 501. Introduction to theories and models of instructional design. Examination of and practical experience with models based on objectivist and constructivist frameworks.


EDUC 506. Social Justice Education and Teaching  (3-0) Cr. 3. F.S.SS. Prereq: 6 graduate credits in education Engage with justice-oriented multicultural frameworks for transformative education and education research, understand equity in education in historical and contemporary contexts, develop principled approaches to critical self-reflection, interpret educational situations in justice-oriented ways, and counter inequities in education through curriculum, pedagogy, and research.

EDUC 507. Principles and Practices of Distance Learning.  (Dual-listed with 407.) (2-2) Cr. 3. F.SS. Prereq: 501, convenient access to the Web. This course will be offered in flexible and distance learning (FDL) modes, mainly utilizing telecommunications including the Internet. Review of FDL cases in a variety of contexts and pedagogic styles, plus research into relevant topics. Identification of underlying principles and frameworks for best practice in this field.

EDUC 514. Introduction to Science Teaching and Learning.  (1-2) Cr. 2. SS. Prereq: Admission to M.A.T. program Introduction to critical issues facing science education, science education goals reflecting contemporary purposes of schooling, and how people learn science.

EDUC 516. Antiracist Curriculum Development and Implementation.  (2-2) Cr. 3. Prereq: 9 credits in education. Introduction to historical, sociological, philosophical and pedagogical foundations of antiracist/ multicultural education. Examination of causes of racism, other forms of discrimination, and inter-group conflict from different theoretical perspectives and experiential exercises.
EDUC 518. Secondary Science Methods I. (3-0) Cr. 3. Prereq: EDUC 280L or EDUC 514; undergraduate students must register concurrently for EDUC 280A; graduate students must register concurrently for EDUC 591D. Admitted to the Educator Preparation Program.
Develop an understanding of research-based practices for effective and equitable science teaching that align with state and national standards. Emphasis is on the character and role of science inquiry, teaching behaviors and strategies, and actively engaging students in self-evaluation and evidence-based inquiry learning experiences.

EDUC 533. Theories of Learning. (Same as Psych 533.) (3-0) Cr. 3 F. Prereq: 333 or teacher licensure.
Major theories of learning and cognition in educational settings. Emphasis on behavioral, cognitive, constructivist, and sociocultural theories and their implications for educational policy and practice.

EDUC 541. How People Learn: Implications for Teaching Science and Mathematics.
(3-0) Cr. 3. Prereq: Bachelor’s degree Examination of theories of learning and motivation in science and mathematics and their application to teaching and current research in science and mathematics education.


EDUC 547. Nature of Science.
(Dual-listed with C I 347). (3-0) Cr. 3. F. Prereq: Concurrent enrollment in C I 518 or permission of instructor
The intersection of issues in the history, philosophy, sociology, and psychology of science and their application to and impact on science teaching and learning, science teacher education, and science education research.

EDUC 548. Restructuring Science Activities.
(3-0) Cr. 3. S.SS. Prereq: Admission to teacher education or teaching license
Modification of laboratory activities and other everyday science activities so they are more congruent with how students learn, the nature of science, and the National Science Education Standards.

(3-0) Cr. 3. Prereq: Graduate or senior level status or permission of instructor
This course takes a nonlinear, reflective view of the historical, social, economic, political, and legal contexts of the education of African Americans in the U.S. Educational theories and philosophies, Critical Race Theory and Black Feminist Thought form the framework for investigating broad-based, multiple issues of education for African Americans in the U.S. as they are situated in the prevailing dominant views.

EEOB 573C. Techniques for Biology Teaching: Fungi and Lichens.
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental
courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**EEOB 573D. Techniques for Biology Teaching: Aquatic Ecology.**
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**EEOB 573E. Techniques for Biology Teaching: Prairie Ecology.**
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**EEOB 573F. Techniques for Biology Teaching: Wetland Ecology.**
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**EEOB 573J. Techniques for Biology Teaching: Biology of Invertebrates.**
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**EEOB 573K. Techniques for Biology Teaching: Non-invasive Use of Living Organisms.**
(Cross-listed with IA LL). Cr. 1-2. Repeatable. SS.
The development and implementation of laboratory exercises suitable for inclusion in elementary, middle, high school, and community college biology and environmental courses. Exercises will be built around common organisms and ecosystems in Iowa. Field trips.

**ENGL 500: Teaching Multimodal Composition.** (3-0) Cr. 3. F. **Prereq:** Graduate classification; must be teaching **ENGL 150** or **ENGL 250** concurrently
Introduction to the teaching of ISUComm Foundation Courses. Foundational and relevant newer composition theory and pedagogical methods related to ISUComm Foundation Courses objectives and their classroom enactment, including development of assignments and supporting activities, and evaluation of student projects. Required of all new teaching assistants teaching ISUComm Foundation Courses.

**ENGL 503. Composition Theory.** (3-0) Cr. 3. **Prereq:** 6 credits in English.
In-depth consideration of the theory and practice of composition pedagogy. Opportunities for actual classroom application.

**ENLG 504. Teaching Advanced Communication.** (3-0) Cr. 3. F., Prereq: Graduate Classification. Teaching business and technical communication in university, community college, and industry settings. Emphasizes curriculum planning, materials development, assignment design, responding to student work, assessment of student work, and distance (online) teaching.

**ENGL 521. Teaching of Literature and the Literature Curriculum.** (3-0) Cr. 3. Alt. F., offered 2006. Prereq: 6 credits in literature. Examination of the roles of the literary work, reader, and teacher in literary study. Responses to literature. Place of literature in language arts. Study and development of curriculum materials for middle school, high school, and college levels of instruction.

**ENGL 525. Research and Teaching of Second Language Pronunciation.** (Same as Ling 525.) (3-0) Cr. 3. Alt. F. Prereq: 511 or an introductory course in linguistics. Theoretical and practical issues and techniques in the teaching of second language pronunciation as it relates to other areas of language, especially listening and speaking skills. Topics will include segmental and suprasegmental features; intelligibility; pronunciation in language assessment; classroom, technology and individual instruction; and research issues. Topics will be relevant to those intending to teach or research in various contexts.

**ENGL 526. Computer-Assisted Language Learning.** (Same as Ling 526.) (3-0) Cr. 3. Alt. S. odd numbered years Prereq: 511 and 513 or equivalent. Theory, research, and practice in computer use for teaching non-native speakers of English. Methods for planning and evaluating computer-based learning activities.

**ENGL 528. English for Specific Purposes.** (Cross-listed with LING). (3-0) Cr. 3. Prereq: ENGL 511 or LING 511 or an introductory course in linguistics. Issues and techniques in analyzing, teaching, and assessing English for specific purposes. Topics include theories of specific purpose language use, analysis of learner needs in target language contexts, and syllabus and materials development for teaching and assessment.

**ENGL 558. Teaching Creative Writing.** (3-0) Cr. 3. Prereq: Graduate classification. Pedagogical approaches that are effective for grade-school through adult-education creative writing teaching. Writing exercises, workshops, text evaluation, and visits from creative writers.

**ENGL 559. Creative Writing Teaching Internship.** Cr. 1 to 3. Prereq: Concurrent enrollment in 558, permission of participating instructors. Students assist in an introductory creative writing class. Some supervised teaching but mainly evaluation of submissions and individual conferences. Requirements and grades determined by participating instructors.

**ENGL 588. Supervised Practice Teaching in Teaching English as a Second Language.**
Intensive observation of ESL instruction and supervised practice in teaching learners of English in a context appropriate to the student teacher’s goals.

**ENGL 590B. Special Topics: Teaching English as a Second Language (TESL)/Applied Linguistics.**
(Cross-listed with LING). Cr. arr. Repeatable. Prereq: Permission of the Graduate Studies Committee according to guidelines available in the department office

**ENGL 592C. Core Studies in Rhetoric and Professional Communication: Multimodal Theory and Pedagogy.**
(Cross-listed with SP CM). (3-0) Cr. 3. Repeatable, maximum of 9 credits. Prereq: 12 credits in rhetoric, linguistics, or literature, excluding ENGL 150 and ENGL 250 Seminar on topics central to the fields of rhetoric and professional communication or composition.

**ENGL 603. Seminar in Composition Theory** (3-0) Cr. 3. Prereq: 503. Exploration of relationships between theory and practice in current pedagogy. Intensive examination of contemporary theories of poststructuralism, new media, feminism, postcolonialism, or cultural studies and their impact on current pedagogical practice. Participation in pedagogical research and theory building.

**ENT 590K. Special Topics: Teaching Experience.**
Cr. 1-3. Repeatable.

**FS HN 590C. Special Topics: Teaching.**
Cr. 1-3. Repeatable, maximum of 6 credits. F.S.SS.

**GR ST 570. Teaching Practices.**
(0.5-0) Cr. 0.5. Alt. S., offered even years. Prereq: graduate classification. Preparation of a teaching portfolio and course materials; lecturing, technology.

**HD FS 691. Internship.** Cr. arr. May be repeated. F.S.SS. Prereq: Permission of instructor. Offered on a satisfactory-fail grading basis only. Supervised practice and experience in the following specified areas: A. College Teaching

**HG ED 504. History of Higher Education in the United States.** (3-0) Cr. 3. Prereq: Graduate classification. Survey course in the history of higher education in the United States, from the colonial era to the present. Emphasis is placed on enduring debates about the purpose(s) of higher education and issues of equity and access along lines of race, class, and gender. Readings include primary and secondary materials.
HG ED 561. College Teaching. (3-0) Cr. 3. **Prereq:** 6 graduate credits. This course will review educational theories, methods and strategies for the improvement of college instruction. It seeks to assist potential college instructors in developing knowledge of protocol, assessment, and the scholarship and art of teaching. This course will emphasize the unique challenge of college teaching in a changing student population environment.

HG ED 562. Curriculum Development in Colleges. (3-0) Cr. 3. **Prereq:** Graduate classification. Modes of curriculum design, development, and change in colleges. Development of curricular leadership and evaluation strategies.

HG ED 576. Student Development in Higher Education. 
(3-0) Cr. 3. F. **Prereq:** Admission to Higher Education Program 
Theories of student development and their applications in student affairs programs, services, and activities are reviewed. Emphasis is placed on psychosocial, cognitive developmental, and learning theories as well as newer integrative theories.

HG ED 577. Campus Environments and Cultures. (3-0) Cr. 3. F. **Prereq:** Admission to Higher Education Program. Study of the impact of the college environment on students. Ability to use environmental theory to create positive learning situations for students.

HG ED 578. Students in U.S. Higher Education. (3-0) Cr. 3. F. **Prereq:** Admission to Higher Education Program. The relationship between college students and characteristics from 1950 to the present. Traditional assumptions about the impact of higher education on students will be reviewed and challenged. Campus issues and concerns relative to commuters and residential life. Participants will analyze institutional responses to students through college missions, organizational development, structure, core curriculum and retention.

HG ED 580I. Current Topics in Community Colleges: Learning and Teaching. 
(1-3) Cr. 1-3. **Prereq:** Graduate classification 
Current issues and new directions in community college education. Topics developed To the specific needs of colleges. For off-campus.

HG ED 582. The Comprehensive Community College. (3-0) Cr. 3. **Prereq:** Graduate classification. The community college as a unique social and institution: its history, philosophy, functions, programs, faculty and student characteristics, organization and finance, trends, and issues. Reviews research and exemplary community college internationally, nationally, and in Iowa.

HG ED 666. Academic Issues and Cultures. (3-0) Cr. 3. S. **Prereq:** 504. This course will examine institutional culture and issues in higher education focusing on the roles and responsibilities

HORT 698. Horticulture Teaching Practicum. 
(1-0) Cr. 1. S. **Prereq:** Graduate student classification 
Discussions are intended to foster the development of graduate students as teaching assistants and future horticulture/plant science teachers. Topics include establishing a classroom presence, improving lectures, motivating students, dealing with difficult or disruptive students, and developing a teaching philosophy. Offered on a satisfactory-fail basis only.
JL MC 598. Seminars in Mass Communication. Cr. 1 to 3 each. L. Teaching Journalism and Mass Communication

KIN 592. Practicum in College Teaching.  
Cr. 1-3. Repeatable, maximum of 3 credits. F.S.SS.  
Supervised experience with teaching an upper division, classroom-based course. Offered on a satisfactory-fail basis only.

MATH 591. Orientation for Mathematics Graduate Students I.  
(0.5-0) Cr. 0.5. F.  
Fall semester orientation seminar. Required for graduate students in Mathematics and Applied Mathematics. Topics include teaching at the university level and communication of mathematics. Offered on a satisfactory-fail basis only.

MATH 592. Orientation for Mathematics Graduate Students II.  
(0.5-0) Cr. 0.5. S.  
Spring semester orientation seminar. Required for graduate students in Mathematics and Applied Mathematics. Topics include teaching at the university level and communication of mathematics. Offered on a satisfactory-fail basis only.

NREM 598. Natural Resource Ecology and Management Teaching Practicum.  
Cr. 1. F.S.SS. Prereq: Graduate classification as M.S. candidate in a NREM major and permission of instructor.  
Graduate student experience in teaching. Student must plan and present at least one unit of subject matter in a course or extension workshop. Teaching practicum must be documented by the student and approved by the student’s POS committee. Offered on a satisfactory-fail basis only.

Cr. 1. F.S.SS. Prereq: Graduate classification as a Ph.D. candidate in a NREM major and permission of instructor.  
Graduate student experience in teaching. Student must plan and present substantive subject matter for a minimum of three weeks in lecture and/or laboratory formats, or a series of extension seminars/workshops. Teaching practicum must be documented by the student and approved by the student’s POS committee. Offered on a satisfactory-fail basis only.

PHYS 501. Oral Communication of Physics Seminar. (2-0) Cr. 1 each time taken. F. Prereq: Graduate classification. Practice in communication of physics and astronomy in typical college classroom settings and professional meetings. Skills emphasized include selection of physical examples and analogies, presentation styles of topics, scientific dialogue, organization of physics topics, and classroom technique. The teaching proficiency of each student is evaluated in detail. For graduate physics majors only. Offered on a satisfactory-fail grading basis only.

POL S 590T. Special Topics: Teaching Preparation.  
Cr. 2-5. Repeatable. F.S. Prereq: 15 credits in political science, written permission of Instructor

PSYCH 533. Theories of Learning. (Same as EDUC 533.) See Curriculum and Instruction.

PSYCH 633. Teaching of Psychology. (3-0) Cr. 3. F. Prereq: 333 or teacher licensure.
Major theories of learning and cognition in educational settings. Emphasis on behavioral, cognitive, constructivist, and sociocultural theories and their implications for educational policy and practice.

**PSYCH 691T. Practicum in Psychology: Teaching.**  
Cr. 1-3. Repeatable, maximum of 6 credits. F.S. **Prereq:** Permission of instructor, PSYCH 633  
Offered on a satisfactory-fail basis only.

**SP CM 513. Proseminar: Teaching Fundamentals of Public Speaking.** (0-2) Cr. 1. F. Required of all new Speech Communication 212 teaching assistants. Introduction to the teaching of public speaking. Support and supervision of teaching assistants of SP CM 212. Discussion of lesson planning, teaching methods, development of speaking assignments, and evaluation of student speaking.

**TSM 652. Program and Learner Evaluation.** (3-0) Cr. 3. Prereq: Stat 401 or equivalent. Techniques for evaluating learners, facilities, programs, and staff utilizing theories for developing measurement instruments. Outcomes assessment is emphasized.

**TSM 657. Curriculum Development in Technology and Engineering.** (3-0) Cr. 3. Prereq: Permission of instructor. Basic concepts, trends, practices, and factors influencing curriculum development, techniques, organization and procedures. Emphasis will be given to course development using the backward design process.

**TSM 694. Teaching Practicum.**  
(Cross-listed with A E). Cr. 1-3. Repeatable. F.S.SS. **Prereq:** Graduate classification and permission of instructor  
Graduate student experience in the agricultural and biosystems engineering departmental teaching program.

**VET PATH 530. Teaching and Learning in Veterinary Medical Education.** Cr. 3. Study of principles of teaching and learning as they relate to veterinary medical education. Subtopics will include 1. Theories of learning, 2. Analyzing content/learners/context, 3. Identifying goals, 4. Identifying appropriate instructional strategies (specific to medical education), 5. Matching assessment processes to goals and strategies, 6. Common curricular approaches and decision-making processes in medical education, 7. The scholarship of teaching and learning for veterinary medical educators.
November 1, 2021

Dear Members of the Curriculum Committee,

I have reviewed the proposal for the School of Education’s Graduate Certificate in Postsecondary Teaching and I am supportive of the minor. I recognize that this minor will replace the Graduate Certificate in Community College Teaching. The Graduate Certificate in Community College Teaching was historically used to meet State of Iowa licensure requirements for teaching in community colleges. These licensure requirements were eliminated 10+ years ago for community college faculty.

The faculty in the Community College Leadership and Higher Education area met on 11/11/19 and voted to discontinue the Graduate Certificate in Community College Teaching and support the emerging Graduate Certificate in Postsecondary Teaching. This new certificate focus better aligns with the broad non-licensure needs of all postsecondary teachers and will equip future faculty members at all institutional types.

Sincerely,

Doug

Douglas A. Smith, Ph.D.
Associate Professor and Division Head
Higher Education and Community College Leadership

Iowa State University
School of Education
Ames, IA 50011
smithda@iastate.edu
8 November 2021

Curriculum Committee
School of Education
College of Human Sciences
Iowa State University

Dear Members of the Curriculum Committee,

This note is in support of the School of Education’s Graduate Certificate in Postsecondary Education, upon approval, will replace the Center for Excellence in Learning and Teaching (CELT) Graduate Student Teaching Certificate. The CELT certificate was first created in 2006 and awarded in 2010 under the administration of CELT’s Preparing Future Faculty Program. The move of the certificate from CELT, a central unit reporting to the Senior Vice President and Provost Office, to the academic home of the School of Education enables us to focus our efforts within the Preparing Future Faculty Program and the School of Education to provide an academic home to support the certificate. CELT will continue to promote the Graduate Certificate and offer the Preparing Future Faculty courses as electives within the certificate program. We look forward to our continued successful collaborations with the School of Education and supporting the School of Education Graduate Certificate in Postsecondary Education.

Sincerely,

Sara Marcketti, Ph.D.
Director, Center for Excellence in Learning and Teaching
Morrill Professor, Apparel, Events, and Hospitality Management Department
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515-294-4887