

# SECONDARY EDUCATION, MS

Department of Teacher Education, College of Education, Health, and Human Sciences

## Vision Statement

Designed for those teaching in secondary schools across a variety of curricular areas, the secondary education program offers an integrated approach to developing the skills and dispositions needed for today's educational environments. Graduate students choose a program of study that explores content and pedagogy and that also supports their professional goals and standards of practice.

The program is specifically designed around the pillars of:

- Implementing culturally responsive teaching practices
- Engaging in research and assessment to inform instructional decision making
- Applying theoretical frameworks to guide teaching
- Using sound digital pedagogy

## Program Contact Information

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Program Website (<http://www.unomaha.edu/college-of-education/teacher-education/graduate/secondary-education.php>)

## Other Program-Related Information

**The master's degree in secondary education does not lead to initial teacher certification.**

## Unclassified Students

Students who are not planning to pursue a program leading to a graduate certificate or a master's degree can be admitted to secondary education with unclassified status. Candidates holding a previous master's degree in education who are seeking additional teaching endorsements may wish to choose an unclassified status. Unclassified students are allowed to take courses for which they meet the prerequisite. Successful completion of graduate courses as an unclassified student does not obligate the department to accept those courses for credit toward the fulfillment of degree requirements.

Formal advisement in an endorsement area is required.

- Candidates should apply for endorsements as soon as they are eligible. If a candidate applies 10 years or more after completing all coursework, a review is required to determine if more coursework is needed.
- To add an endorsement 1/3 of the coursework must be completed at UNO in the endorsement area.

## Admissions

General Application Requirements and Admission Criteria (<http://catalog.unomaha.edu/graduate/admission/>)

## Program-Specific Requirements

### Application Deadlines (Spring 2024, Summer 2024, and Fall 2024)

- Fall: August 1
- Spring: January 10
- Summer: June 1

## Other Requirements

- A minimum undergraduate GPA of 3.0 (on a 4.0 scale).
- **English Language Proficiency:** Applicants are required to have a command of oral and written English. Those who do not hold a baccalaureate or other advanced degree from the United States, **OR** a baccalaureate or other advanced degree from a predetermined country on the waiver list (<https://www.unomaha.edu/graduate-studies/prospective-students/Proof%20of%20English%20Proficiency-%20International.pdf>), must meet the minimum language proficiency score requirement in order to be considered for admission.
  - Internet-based TOEFL: 80, IELTS: 6.5, PTE: 53, Duolingo: 110
- If working toward a master's degree, applicants must have a valid teaching certificate **or** application to the concentration that leads to certification (e.g. Teacher Academy Project concentration). Exceptions to this will be considered on an individual basis. If needed, please contact Chris Wilcoxon, the Graduate Program Chair. Please note, a master's degree does lead to initial certification.
- International students who do not intend to teach in the U.S. **may** be eligible for admission.

## Degree Requirements

The Master of Science in secondary education requires 36 hours of graduate level courses in four areas:

- Research
- Assessment
- Culturally responsive teaching
- Theoretical frameworks for effective teaching

Code	Title	Credits
<b>Concentrations</b>		
Secondary education concentrations - The required courses for a Master of Science in secondary education vary by concentration. The courses for each concentration are determined in consultation with the concentration advisor.		33
<b>Exit Requirement</b>		
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Total Credits</b>		<b>36</b>

## Concentrations

### Bilingual Education Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE (Exit Requirement - Must receive a grade of B or better.)	3

### Assessment Course Requirement

Choose 3 hours from the following courses: 3

FLNG 8020	SEMINAR:FL/TESOL RESEARCH	
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	3
<b>Culturally Relevant Teaching</b>		
TED 8130	LANGUAGE, CULTURE, AND POWER	3
TED 8480	FOUNDATIONS OF BILINGUAL EDUCATION	3
TED 8490	SPANISH LANGUAGE ARTS	3
Choose 3 hours from the following courses: 3		
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8006	SPECIAL METHODS IN THE CONTENT AREA	3
TED 8120	FOUNDATIONS OF ENGLISH AS A SECOND LANGUAGE (ESL)	3
TED 8695	LITERACY AND LEARNING	3
Select 3 hours from the following: 3		
SPAN 8076	HISPANIC BILINGUALISM	
SPAN 8086	INTRODUCTION TO HISPANIC LINGUISTICS	
SPAN 8126	HISPANIC SOCIOLINGUISTICS	
SPAN 8136	SPANISH IN THE UNITED STATES	
SPAN 8226	THE STRUCTURE OF SPANISH	
FLNG 8030	SEMINAR: SECOND AND BILINGUAL LANGUAGE ACQUISITION THEORY	
FLNG 8050	THEORY AND METHODS IN THE TEACHING OF HERITAGE LANGUAGES	
Alternate for any Theoretical Framework Course:		
TED 8980	PRACTICUM: VARIOUS CONTENT AREAS	
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 Capstone is intended to be the last class in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.
- TED 8480, TED 8490 and TED 8695 are taught in Spanish and offered in odd years.

## English Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
<b>Assessment Course Requirement</b>		
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Culturally Relevant Teaching</b>		
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	3
Choose 6 hours from the following courses: 6		
TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8300	EFFECTIVE TEACHING PRACTICES	3
or TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	
Choose 6 hours from the following courses: 6		
TED 8610	TEACHING OF WRITING THROUGHOUT THE CURRICULUM	
TED 8660	YOUNG ADULT LITERATURE	
TED 8750	OXBOW WRITING PROJECT	
Choose 6 hours from any graduate level course with a prefix of ENGL 6		
Choose 3 hours from the following courses: 3		
TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 and TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## English as a Second Language-ESL- Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
<b>Assessment Course Requirement</b>		
Choose 3 hours from the following courses:		3
FLNG 8020	SEMINAR:FL/TESOL RESEARCH	
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	3
<b>Culturally Relevant Teaching</b>		
TED 8006	SPECIAL METHODS IN THE CONTENT AREA	3
TED 8120	FOUNDATIONS OF ENGLISH AS A SECOND LANGUAGE (ESL)	3
TED 8130	LANGUAGE, CULTURE, AND POWER	3
Choose 9 hours from these courses:		9
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8480	FOUNDATIONS OF BILINGUAL EDUCATION	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	3
Choose 3 hours from these courses:		3
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
SPAN 8076	HISPANIC BILINGUALISM	
SPAN 8126	HISPANIC SOCIOLINGUISTICS	
SPAN 8136	SPANISH IN THE UNITED STATES	
SPAN 8226	THE STRUCTURE OF SPANISH	
SPAN 8086	INTRODUCTION TO HISPANIC LINGUISTICS	
FLNG 8030	SEMINAR: SECOND AND BILINGUAL LANGUAGE ACQUISITION THEORY	
FLNG 8050	THEORY AND METHODS IN THE TEACHING OF HERITAGE LANGUAGES	
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## Equity and Social Justice in Education Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
<b>Assessment Course Requirement</b>		
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Culturally Relevant Teaching</b>		
TED 8130	LANGUAGE, CULTURE, AND POWER	3
TED 8180	CULTURALLY RESPONSIVE TEACHING	3
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	3
TED 8290	TRAUMA INFORMED EDUCATION	3
or TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
Select 9 hours of graduate level work with the prefix TED or in a discipline area related to endorsement as approved by advisor.		9
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8300	EFFECTIVE TEACHING PRACTICES	3
Choose 3 hours from the following courses:		3
TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## Instructional Technology Leadership Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Assessment Course Requirement</b>		
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
TED 8300	EFFECTIVE TEACHING PRACTICES	3

**Culturally Relevant Teaching**

Choose 6 hours from the following courses: 6

TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	

**Theoretical Framework for Effective Teaching**

TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	3
TED 8540	DIGITAL CITIZENSHIP	3
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	3
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	3
TED 8580	ONLINE TEACHING AND LEARNING	3
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS	3
or TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	

**Total Credits 36**

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

**Mathematics Concentration**

**Code Title Credits**

**Research Course Requirement**

TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	

**Assessment Course Requirement**

TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
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**Culturally Relevant Teaching**

Choose 6 hours from these courses: 6

TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	

TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	

**Theoretical Frameworks for Effective Teaching**

TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS (OR any graduate level course with the following prefixes: STEM / TED / MATH / CSCI / MTCH)	3
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS (OR any graduate level course with the following prefixes: STEM / TED / MATH / CSCI / MTCH )	3
TED 8640	OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS (OR any graduate level course with the following prefixes: STEM / TED / MATH / CSCI / MTCH )	3
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION (OR any graduate level course with the following prefixes: STEM / TED / MATH / CSCI / MTCH )	3

Choose 3 hours from the following: 3

TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	

Choose 6 hours from any graduate level course with the following prefixes: STEM / TED / MATH / CSCI / MTCH 6

**Total Credits 36**

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

**Middle Level Concentration**

**Code Title Credits**

**Research Course Requirement**

TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	

**Assessment Course Requirement**

TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
or TED 8400	ASSESSMENT AND INTERVENTIONS OF PK-12 READERS	
TED 8376	TEACHING AT THE MIDDLE LEVEL	3

**Culturally Relevant Teaching**

Choose 6 hours from following courses: 6

TED 8130	LANGUAGE, CULTURE, AND POWER	
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TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
Choose 9 hours from the following courses:		9
TED 8300	EFFECTIVE TEACHING PRACTICES	
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	
TED 8470	TEACHING THE LANGUAGE ARTS	
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS	
TED 8610	TEACHING OF WRITING THROUGHOUT THE CURRICULUM	
TED 8640	OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS	
TED 8660	YOUNG ADULT LITERATURE	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 8840	ENGINEERING EDUCATION EXTERNSHIP	
TED 8860	INVENTION & INNOVATION IN ENGINEERING EDUCATION	
TED 9100	THEORIES, MODELS, AND PRACTICES OF LITERACY	
TED 9110	PRINCIPLES AND PRACTICES FOR TEACHING READERS	
Choose 6 hours from any graduate level course with the prefix TED or in a discipline area related to endorsement as approved by advisor.		6
Choose 3 hours from these courses:		3
TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## School Library Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	

TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Assessment Course Requirement</b>		
TED 8760	MANAGING COLLECTIONS IN LIBRARIES AND INFORMATION AGENCIES	3
<b>Culturally Relevant Teaching</b>		
Choose 3 hours from following courses:		3
TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
Choose 3 hours of following courses:		3
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
TED 8520	SCHOOL LIBRARY PRACTICUM	3
TED 8540	DIGITAL CITIZENSHIP	3
TED 8650	CHILDREN'S LITERATURE AND EDUCATION	3
TED 8660	YOUNG ADULT LITERATURE	3
TED 8710	RESEARCH AND INQUIRY	3
TED 8740	ORGANIZATION OF INFORMATION	3
TED 8830	LEADERSHIP AND MANAGEMENT IN SCHOOL LIBRARIES	3
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## Science Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Assessment Course Requirement</b>		

TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
<b>Culturally Relevant Teaching</b>		
Choose 6 hours from the following courses:		6
TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8420	TRENDS AND TEACHING STRATEGIES IN SCIENCE EDUCATION	3
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	3
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS	3
TED 8640	OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS	3
TED 8860	INVENTION & INNOVATION IN ENGINEERING EDUCATION	3
Choose 3 hours from the following courses:		3
TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
Choose any 3 hour graduate level course with the following prefixes: STEM / TED / AVN / BIOL / BIOI / CHEM / GEOG / GEOL / PHYS		3
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

## Science, Technology, Engineering, and Mathematics (STEM) Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
or TED 8010	INTRODUCTION TO RESEARCH	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE	3
or TED 8730	PK-12 CAPSTONE	
<b>Assessment Course Requirement</b>		

TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
<b>Culturally Relevant Teaching</b>		
Choose 6 hours from the following courses:		6
TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 8800	MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	3
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS (OR any 3 hour graduate level course with the following prefixes: STEM / TED / PHYS / CIST / CIVE / GEOG / ISQA / ITIN / MATH / MTCH / NSCI )	3
TED 8640	OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS (OR any 3 hour graduate level course with the following prefixes: STEM / TED / PHYS / CIST / CIVE / GEOG / ISQA / ITIN / MATH / MTCH / NSCI )	3
TED 8840	ENGINEERING EDUCATION EXTERNSHIP (OR any 3 hour graduate level course with the following prefixes: STEM / TED / PHYS / CIST / CIVE / GEOG / ISQA / ITIN / MATH / MTCH / NSCI )	3
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	3
TED 8860	INVENTION & INNOVATION IN ENGINEERING EDUCATION (OR any 3 hour graduate level course with the following prefixes: STEM / TED / PHYS / CIST / CIVE / GEOG / ISQA / ITIN / MATH / MTCH / NSCI )	3
Choose 3 hours from the following courses:		3
TED 8540	DIGITAL CITIZENSHIP	
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	
Graduate courses with the following prefixes can be substituted for courses in the Theoretical Frameworks requirements if approved by your advisor: STEM/ TED/ PHYS/ STAT/ AERO/ AVN/ BIOL/ BIOI/ CSCI/ CHEM/ CIST/ CIVE/ GEOG / GEOL/ ISQA/ ITIN/ MATH/ MTCH/ NSCI		
<b>Total Credits</b>		<b>36</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

### Teacher Academy Project Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE (Exit Requirement-Must receive a grade of B or better.)	3
or TED 8730	PK-12 CAPSTONE	
<b>Assessment</b>		
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
<b>Culturally Relevant Teaching</b>		
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	3
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	3
or TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
or TED 8180	CULTURALLY RESPONSIVE TEACHING	
<b>Theoretical Frameworks for Effective Teaching</b>		
TED 8006	SPECIAL METHODS IN THE CONTENT AREA	3
TED 8300	EFFECTIVE TEACHING PRACTICES	3
TED 8390	CLASSROOM MANAGEMENT IN PRACTICE	3
TED 8310	HUMAN DEVELOPMENT - CONTEMPORARY IMPLICATIONS FOR TEACHING & LEARNING	3
SPED 8030	TEACHING STUDENTS WITH EXCEPTIONALITIES	3
TED 8540	DIGITAL CITIZENSHIP	3
or TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
or TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 9110	PRINCIPLES AND PRACTICES FOR TEACHING READERS	3
TED 9120	GRADUATE IN-SERVICE TEACHING	3
<b>Total Credits</b>		<b>39</b>

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

### Curriculum, Instruction, and Assessment Concentration

Code	Title	Credits
<b>Research Course Requirement</b>		
TED 8010	INTRODUCTION TO RESEARCH	3
or TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	
TED 8900	SECONDARY EDUCATION GRADUATE CAPSTONE (Exit requirement - Must receive a grade of B or better.)	3
or TED 8730	PK-12 CAPSTONE	

<b>Assessment Course Requirement</b>		
TED 8050	DATA-DRIVEN DECISION MAKING FOR EDUCATORS	3
TED 8250	ASSESSMENT FOR CLASSROOM TEACHER	3
or TED 8400	ASSESSMENT AND INTERVENTIONS OF PK-12 READERS	

<b>Culturally Relevant Teaching</b>		
Choose 9 hours from the following courses:		
TED 8130	LANGUAGE, CULTURE, AND POWER	
TED 8150	ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES	
TED 8160	ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS	
TED 8180	CULTURALLY RESPONSIVE TEACHING	
TED 8210	THE PRINCIPLES OF MULTICULTURAL EDUCATION	
TED 8280	INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION	
TED 8290	TRAUMA INFORMED EDUCATION	
TED 9200	CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE	

<b>Theoretical Frameworks for Effective Teaching</b>		
Choose 6 hours from the following courses:		
TED 8300	EFFECTIVE TEACHING PRACTICES	
TED 8720	INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION	
TED 8370	DATA VISUALIZATION AND MODELING FOR EDUCATORS	
TED 8376	TEACHING AT THE MIDDLE LEVEL	
TED 8530	INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS	
TED 8610	TEACHING OF WRITING THROUGHOUT THE CURRICULUM	
TED 8640	OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS	
TED 8660	YOUNG ADULT LITERATURE	
TED 9100	THEORIES, MODELS, AND PRACTICES OF LITERACY	
TED 9110	PRINCIPLES AND PRACTICES FOR TEACHING READERS	

Choose 3 hours from the following courses:		
TED 8540	DIGITAL CITIZENSHIP	3
TED 8550	TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING	
TED 8560	TECHNOLOGY FOR DIVERSE LEARNERS	
TED 8580	ONLINE TEACHING AND LEARNING	
TED 8590	TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS	

Choose a 6 hour graduate course in TED or in discipline area related to endorsement as approved by advisor. 6

**Total Credits 36**

- A diversity course must be taken within the first half of the program.
- TED 8900 or TED 8730 Capstone is intended to be the last course in your program. A grade of B or better must be received to show satisfactory completion of the course and for program completion.

**TED 8000 SPECIAL STUDIES (3 credits)**

A series of intensive studies especially for in-service teachers scheduled as regular seminars or classes, according to purpose. Possible topics may include Reading Intervention, Mental Health, Social Emotional Learning, Math in the Community, etc.

**Prerequisite(s):** Graduate status

**TED 8006 SPECIAL METHODS IN THE CONTENT AREA (3 credits)**

This course is designed to develop knowledge, skills, and dispositions requisite of teachers. Course content is determined by the discipline area. For some content areas a field experience will be required. This is an in-school, guided practicum completed in conjunction with TED 4000 math, science, language arts, world languages, Business, Information Technology, ESL and social studies sections. Candidates must demonstrate competencies related to performance in 7-12 classrooms. This is the final practicum experience prior to the clinical practice semester. (Cross-listed with TED 4000).

**TED 8010 INTRODUCTION TO RESEARCH (3 credits)**

This course will introduce advanced degree candidates to: A) an understanding of the scientific method as applied to behavioral research, both qualitative and quantitative; B) assessment, evaluation, descriptive, causal-comparative, experimental, and qualitative data gathering procedures and analytical strategies; C) sampling theory, techniques, distribution and hypothesis testing; D) specific designs, methods, and tools of qualitative and quantitative research; E) search and retrieval of published research, both American and international (global); F) basic statistics, both descriptive and inferential; G) the ethical requirements of conducting research with human participants as outlined by Institutional Review Boards; H) a project involving critical evaluation of both qualitative and quantitative research studies.

**Prerequisite(s):** Graduate standing.

**TED 8030 SEMINAR IN EDUCATION (3 credits)**

This is a variable content course focusing on topics of current relevance to PK-12 teachers.

**Prerequisite(s):** Graduate standing.

**TED 8040 SEMINAR ON STUDENT TEACHING/NEW TEACHER INDUCTION (3 credits)**

The seminar is designed for experienced teachers who are, or may be, serving as cooperating teachers for student teachers or as mentor teachers for beginning teachers. Participants will study the purposes, techniques, and trends involved in serving as a cooperating teacher or as a mentor.

**Prerequisite(s):** Successful teaching experience is required for this course.

**TED 8050 DATA-DRIVEN DECISION MAKING FOR EDUCATORS (3 credits)**

This course provides graduate students with hands-on experiences that model data-driven decision making for educational success in today's classroom. Students will learn how to create valid and reliable assessments; interpret standardized test data; build data models that identify student, classroom, program, and school needs; and in general, to systematically enhance educational decision making from a base of carefully collected information. Graduate students will also explore data collection and analysis strategies associated with technologies such as cloud computing, tablet computers, and smart phones. In addition, they will experience data-driven decision-making models that can be integrated into student lessons to not only teach more effectively with data-driven decisions, but also to help teach students about data-driven decision-making. The course will use real data sets and cases, in interesting, hands on and technology-rich activities, to help educators learn how to find the "educational story" represented by a set of carefully collected data points. (Cross-listed with STEM 8050).

**Prerequisite(s):** Graduate standing.

**TED 8055 FOUNDATIONS OF ENGLISH AS A SECOND LANGUAGE (ESL) (3 credits)**

This course is designed to enhance candidates' understanding of the historical, political, and theoretical perspectives of K-12 English as a Second Language (ESL) education for English Learners (ELs) in the U.S. context. As dedicated practitioners, reflective scholars, and responsible citizens, students will have knowledge of factors that contribute to an effective multicultural and multilingual learning environment. TED 3050 includes an in school, guided practicum. Candidates must demonstrate competencies related to teaching English Learners (ELs) in K-12 classrooms. This is the first of two practicum experiences to complete the field experience requirements for Nebraska Department of Education.

**Prerequisite(s):** TED 2300 (EDUC 2010) OR TED 2380; and TED 2050.

**TED 8060 CURRENT ISSUES AND TRENDS IN EDUCATION (3 credits)**

The course is an advanced study of current issues and trends which have substantial impact on PK-12 education. The graduate candidates who take this class will read, analyze, and evaluate relevant research in order to become conversant in those issues.

**Prerequisite(s):** Graduate status is required.

**TED 8070 TEACHING MULTIPLE INTELLIGENCE (3 credits)**

This course focuses on the utilization of the multiple intelligences (MI) theory by teachers to enhance children's understanding of various disciplines. Graduate candidates will have the opportunity to explore, evaluate, and develop various methodologies that foster understanding.

**Prerequisite(s):** Graduate status.

**TED 8080 STORYTELLING AND EDUCATION (3 credits)**

This course is designed to consider the importance of storytelling, to provide teacher candidates with the background materials for storytelling, to study resource material for storytelling from a variety of cultures, and to develop techniques for storytelling. Actual experience in storytelling and opportunities for evaluating storytelling experiences will be provided.

**Prerequisite(s):** Graduate status

**TED 8100 RESEARCH PROJECT (1-3 credits)**

This course is designed for individual or group study and analysis of specific problems in schools dealing with curriculum and instruction in areas which have a broad scope of application rather than a specific level.

**Prerequisite(s):** Approval of Advisor.

**TED 8120 FOUNDATIONS OF ENGLISH AS A SECOND LANGUAGE (ESL) (3 credits)**

TED 8120 is designed to enhance graduate candidates' knowledge of the historical, political, and theoretical perspectives of K-12 English as a Second Language (ESL) education for English Learners (ELs). As dedicated practitioners, reflective scholars, and responsible citizens, graduate candidates will learn strategies for designing and promoting effective multicultural and multilingual learning environments. This course includes an in-school, guided practicum through which graduate candidates must demonstrate competencies related to standards related to teaching ELs in K-12 classrooms. This is the first of two practicum experiences to complete the field experience requirements for Nebraska Department of Education's ESL teaching endorsement.

**Prerequisite(s):** Not open to non-degree graduate students.

**TED 8130 LANGUAGE, CULTURE, AND POWER (3 credits)**

This course will focus on the intersection of language, culture, and power in the schools. This seminar will research how each component impacts the students and teachers in the classroom.



**TED 8150 ANTI-RACISM EDUCATION: PRINCIPLES AND PRACTICES (3 credits)**

This course provides a theoretical analysis of race, racism and the implications for anti-racist education. In addition to exploring the key features of anti-racism education, the course also addresses other axes of oppression, namely, class and gender, with a critical focus on racialized power and privilege, and how such features function in the broader U.S context as well as the schooling environment. Of equal importance is a critical interrogation of the historical, ideological, and political processes that produce and maintain racism. Course participants explore pedagogies, curriculum, and school leadership strategies as mechanisms for instituting anti-racism work in schools and community.

**Prerequisite(s):** Graduate Status

**TED 8160 ENGLISH AS A SECOND LANGUAGE STRATEGIES FOR PK-12 EDUCATORS (3 credits)**

This course is designed to enhance graduate candidates' knowledge of PK-12 English as a Second Language (ESL) pedagogical and assessment strategies that address the needs of English Language Learners (ELs) in content area classrooms. As dedicated practitioners, reflective scholars, and responsible citizens, graduate candidates will be able to explore evidence-based pedagogical and assessment strategies to use in educational contexts serving ELs.

**Prerequisite(s):** Graduate candidate status. Not open to non-degree graduate students.

**TED 8170 DEVELOPMENTAL ASSESSMENT OF THE YOUNG CHILD (3 credits)**

This course is designed as a survey of developmental assessment in early childhood education (ages birth to eight years). Selection of assessment tools and strategies, implementation, data collection, analysis of results, and teaching impact are addressed in context of key assessment purposes in the early childhood field.

**Prerequisite(s):** Graduate status.

**TED 8180 CULTURALLY RESPONSIVE TEACHING (3 credits)**

This course includes an introductory analysis of the societal and institutional processes and problems which have bearing upon the education of children in urban settings. In addition, the course will focus on knowledge, skills and dispositions related to instructional strategies and classroom management needed for effective teaching in an urban environment.

**Prerequisite(s):** Graduate status

**TED 8190 CONTEMPORARY ISSUES IN URBAN EDUCATION (3 credits)**

This course is designed for candidates who wish to keep abreast of contemporary issues which confront the educational institution and teaching profession within the urban milieu.

**Prerequisite(s):** Graduate Status

**TED 8200 SOCIAL WORLDS OF THE YOUNG CHILD (3 credits)**

This course will explore theoretical and cultural perspectives on the social and emotional development of young children. This course will also examine the relationship between social emotional development, guidance practices, democratic life skills, and school readiness.

**Prerequisite(s):** Graduate status.

**TED 8210 THE PRINCIPLES OF MULTICULTURAL EDUCATION (3 credits)**

This course will develop practicing teachers' awareness of and skill in meeting the needs of P-12 students with regards to the areas of human understanding, acceptance and value. Candidates will examine existing attitudes towards various minority groups such as racial, ethnic, gender, exceptionality, etc. School materials and attitudes will also be examined in determining the effect they have on PK-12 students.

**Prerequisite(s):** Graduate status.

**TED 8220 PLAY AS A LEARNING MEDIUM IN EARLY CHILDHOOD EDUCATION (3 credits)**

This course provides an in-depth examination of young children's play and its curricular role in the early childhood classroom. The origins, developmental outcomes, assessment, curricular implementation, and evaluation of play will be covered, with an emphasis on play as a major component of developmentally appropriate practice with young children. The focus is on teachers learning to help children become partners in the operation of the learning environment.

**TED 8230 LITERATURE FOR THE YOUNG CHILD (3 credits)**

Literature for the young child is examined through the lens of developmentally appropriate practice for informing educators' interactions with children and also for developing high-quality, literature-related projects of study across the early childhood (birth-through-age-eight) continuum.

**Prerequisite(s):** Graduate Status.

**TED 8240 FAMILY, SCHOOL, AND COMMUNITY PARTNERS (3 credits)**

This course will examine the purposes and methods for developing family, school, and community partnerships. Candidates will explore characteristics of diverse families and develop the skills necessary for planning, design, implementation, and evaluation of effective partnerships in early childhood settings.

**Prerequisite(s):** Graduate Status.

**TED 8250 ASSESSMENT FOR CLASSROOM TEACHER (3 credits)**

This course studies assessment principles, effective practices, and classroom assessment processes throughout the curriculum. The research regarding assessment for learning is studied and application is made to classroom practices.

**Prerequisite(s):** Graduate status.

**TED 8260 ADVANCED CURRICULUM IN EARLY CHILDHOOD (3 credits)**

This course is designed to provide an in-depth examination of the processes used in selecting and implementing appropriate curricular content in programs for children ages three to eight years. Particular emphasis is on the role of the teacher as a dedicated practitioner and reflective scholar in the early learning environment.

**TED 8270 TRENDS IN EARLY CHILDHOOD EDUCATION (3 credits)**

This course provides a context for examining socio-political and research-based influences underlying trends in early childhood education at the local, national and international levels.

**Prerequisite(s):** Graduate Status.

**TED 8280 INTRODUCTION TO HUMAN RIGHTS IN P-12 EDUCATION (3 credits)**

The course examines the intersection of human rights and P-12 education and prepares individuals to effectively work with and advocate for children and adolescents in educational settings. Students completing the course will be able to 1) demonstrate an increased understanding of fundamental human rights with a specific emphasis on education rights and the human rights of children and adolescents 2) create learning environments that elevate human rights in educational settings and 3) design developmentally appropriate instruction for children and adolescents on varied human rights topics.

**Prerequisite(s):** Graduate Status

**TED 8290 TRAUMA INFORMED EDUCATION (3 credits)**

This course will present approaches to create trauma-informed classrooms which includes definitions and characteristics of trauma and how it impacts children, a brief history of trauma and associated theories/models, and a practice of skills for intervention in the classroom to support students and their families. Topics include applied teaching strategies which describe research-based techniques to support students with a history of trauma, as well as strategies to recognize signs of secondary trauma and burnout, followed by ways to mitigate them using research-based self-care techniques. (Cross-listed with COUN 8440).

**TED 8300 EFFECTIVE TEACHING PRACTICES (3 credits)**

This course focuses on specific characteristics and behaviors of effective teachers. Course content will be derived from research on teaching and learning.

**Prerequisite(s):** Graduate status

**TED 8310 HUMAN DEVELOPMENT - CONTEMPORARY IMPLICATIONS FOR TEACHING & LEARNING (3 credits)**

This course examines human growth and learning from birth through late adolescence. It is designed to prepare teachers to synthesize information regarding developmental theory and subsequently apply this to lesson design and effective content-area pedagogy. Candidates will examine multiple frameworks related to the cognitive, social/emotional, and physical development of children and use those to analyze current educational practices in PK-12 schools. Cultural influences impacting human development and implications for educational practices will also be examined. The course will include field-based experiences.

**Prerequisite(s):** Admission into a Teacher Education Department graduate program.

**TED 8320 STRENGTHENING LEADERSHIP CAPACITY THROUGH RESEARCH AND COMMUNITY COLLABORATION (3 credits)**

In Strengthening Leadership Capacity through Research and Community Collaboration, students extend their knowledge, reflective practice, and leadership to a community context. The course is designed create a mutually beneficial partnership between students' research agendas and community agencies. The goal is to enhance students' learning of content, understand the community, and perpetuate a sense of civic agency. Additionally, students further their research by submitting an article for publication.

**TED 8370 DATA VISUALIZATION AND MODELING FOR EDUCATORS (3 credits)**

In the growing context of data informed decisions there is a need to answer "what if" questions in a variety of decision-making situations, as well as to display data both visually and interactively. This course will provide foundational skills in data visualization and modeling for educational decision making and instruction. It draws upon key fundamentals in data visualization (representing data trends visually) as well as key strategies in data modeling (interactive representations to explore possible outcomes). The course also explores the use of visualization and modeling technologies as well as assisting student learning with these tools. (Cross-listed with STEM 8370).

**TED 8376 TEACHING AT THE MIDDLE LEVEL (3 credits)**

This course will provide candidates with a variety of middle level teaching techniques and strategies in their classrooms that have been identified in current research literature as appropriate for the middle level. This course is designed to introduce candidates to the unique characteristics of the middle student, school, curriculum, history, and philosophy. (Cross-listed with TED 4370).

**Prerequisite(s):** TED 2300 or EDUC 2010 or TED 2380.

**TED 8390 CLASSROOM MANAGEMENT IN PRACTICE (3 credits)**

This course will provide graduate students with a survey of general classroom management methods for classrooms. Candidates will enhance their understanding of three basic components of effective pedagogy: 1) proactive classroom management, 2) high-impact instructional strategies that impact student engagement and learning, 3) behavior management techniques that incorporate practice, feedback, research, and reflection.

**Prerequisite(s):** Graduate standing

**TED 8400 ASSESSMENT AND INTERVENTIONS OF PK-12 READERS (3 credits)**

This course is designed for graduate candidates enrolled in the Literacy MS or reading specialist endorsement program. The purpose of this course is to develop an understanding of theory and research as it relates to assessment, evaluation and instructional approaches that support Pk-12 reading development. This knowledge is applied through a practicum experience with Pk-12 students in which candidates integrate knowledge and practices related to assessment and evaluation of readers' strengths and needs.

**Prerequisite(s):** Graduate Standing

**TED 8410 IMPROVEMENT OF INSTRUCTION: SPECIAL TOPICS (3 credits)**

This course provides an in-depth study of instructional theory, research, and methodology designed to extend teachers' professional knowledge base and enhance their pedagogical skills. When offered, a course may be limited to improvement of instruction in a selected subject area. (Cross-listed with STEM 8410).

**Prerequisite(s):** Graduate standing.

**TED 8420 TRENDS AND TEACHING STRATEGIES IN SCIENCE EDUCATION (3 credits)**

This course is designed for the graduate candidate in the Department of Teacher Education whose study program emphasis is in the area of science education. The course will describe and analyze past and present trends in science education, including curricula, teaching-learning strategies, the laboratory and instructional materials. The course focus will be K-12 and as such is meant to serve both elementary and secondary graduate candidates. (Cross-listed with STEM 8420).

**TED 8430 SCHOOL CURRICULUM PLANNING (3 credits)**

This course is designed to provide advanced degree candidates with an understanding of the theory, principles, and practices utilized in curriculum planning in American schools. This course focuses on the principles and practices of effective curriculum planning and teachers' part in these processes as curriculum developers. (Cross-listed with STEM 8430).

**TED 8470 TEACHING THE LANGUAGE ARTS (3 credits)**

This course is designed to enhance candidates' knowledge of best practices in teaching reading, writing, listening, and speaking. Candidates will learn about research supported appropriate language arts instruction strategies and assessments. This course will inform graduate students as dedicated practitioners, reflective scholars, and responsible citizens who can meet the challenges of their professions in a changing world.

**TED 8480 FOUNDATIONS OF BILINGUAL EDUCATION (3 credits)**

This course is designed to give future and current teachers a thorough understanding of the theoretical, political, historical, and practical foundations of bilingual/multicultural education in the United States. As dedicated practitioners, reflective scholars, and responsible citizens, graduate students will have knowledge of factors that contribute to effective multilingual and multicultural learning environments that promote individual and societal bilingualism. Advanced Spanish language proficiency required.

**Prerequisite(s):** Graduate status

**TED 8490 SPANISH LANGUAGE ARTS (3 credits)**

This course is designed to reinforce first and second language acquisition theory as it relates to dual immersion settings. Best practices for developing and reinforcing bilingualism and biliteracy are presented and used for planning and delivering instruction. Spanish fluency is required for the course.

**Prerequisite(s):** Graduate status required for graduate students pursuing the bilingual education endorsement and concentration (does not lead to a Nebraska Department of Education teaching endorsement). Advanced Spanish language proficiency required.

**TED 8510 AEROSPACE EDUCATION WORKSHOP (3 credits)**

This course will focus on aviation and space education and its impact on society. It will seek to communicate knowledge, impart skill, and develop attitudes relative to the scientific, engineering and technical as well as the social, economic and political aspects of aviation and space flight efforts. (Cross-listed with AVN 8510, STEM 8510).

**Prerequisite(s):** Graduate standing.

**TED 8520 SCHOOL LIBRARY PRACTICUM (3 credits)**

Candidates will gain direct experience and an understanding of the theories, concepts and activities integral to public services, technical services, and the administration in a 21st Century library and information agency at an assigned field site. Candidates will demonstrate the ability to plan, develop, and implement programming and services for patrons and diverse learners in their schools and communities.

**Prerequisite(s):** Candidates must be in the final 2 semesters of their school library program & must complete an application for the Practicum the semester prior to their practicum. Not open to non-degree graduate students.

**TED 8530 INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS (3 credits)**

This course is designed to provide graduate candidates with the opportunity to enhance interdisciplinary instructional strategies, curricular understanding, and lesson preparation in the areas of science, technology, engineering, the arts, and mathematics (STEAM) through analysis and reflective practices in STEAM. This course provides hands-on experiences that model STEAM integration techniques, including how to effectively engage with community agencies and partners to bring STEAM into the classroom. This course emphasizes not only the technical aspects of STEM, but also the creativity and innovation that arts integration can add to enhance STEM curriculum. Teacher professionals will be provided with tools, resources, and strategies to help them explore and enhance current, new, or supplemental curriculum activities that will enhance STEAM learning, student engagement, and motivation. (Cross-listed with STEM 8530).

**Prerequisite(s):** This course includes both teacher education and STEAM related topics and therefore fits into both TED and STEM program coursework.

**TED 8540 DIGITAL CITIZENSHIP (3 credits)**

The course explores key concepts of Digital Citizenship pertaining to digital law, digital ethics, digital interaction, digital literacy, and cyber-security. The course addresses an educator's role as technology leader in both policy and practice to establish a responsible and robust digital learning community in P-12 schools.

**Prerequisite(s):** Graduate Standing/Status

**TED 8550 TECHNOLOGY FOR CREATIVE AND CRITICAL THINKING (3 credits)**

Technology for Creativity and Critical Thinking investigates the use of visual media tools in P-12 digital learning environments. This course provides candidates an opportunity to develop leadership skills and dispositions relevant to advocacy initiatives addressing policy and best practice in the use of technology in P-12 schools. The course encourages educators to critically evaluate and analyze digital tools supporting creativity and critical thinking through research and project development.

**TED 8560 TECHNOLOGY FOR DIVERSE LEARNERS (3 credits)**

This course will explore categories of diverse learners and how to effectively research and implement assistive technology, software, and tools to enhance their learning opportunities. Candidates will learn how to facilitate the use of instructional technology, pedagogy, and strategies to better meet the needs of diverse learners. With a focus on Universal Design for Learning paired with technology resources, candidates will become proficient in their ability to create learning activities that increase student learning outcomes. Throughout the course, candidates will be challenged as a leader to connect professionally, locally, and nationally to learn and share from professional peers.

**TED 8570 INTERNET IN THE LEARNING PROCESS (3 credits)**

This course is designed to help educators actively explore instructional implementations of Internet use appropriate for use in K-12 classrooms, successful diffusion of Internet innovations in educational environments, and emerging multicultural "breaking down the walls of the classroom" concepts available to educators through Internet use.

**TED 8580 ONLINE TEACHING AND LEARNING (3 credits)**

Online Teaching and Learning is a course for education professionals that investigates the use of online tools for planning, preparing and assessing student learning in an online teaching and learning environment. The course will prepare candidates to provide leadership for online teaching and learning initiatives within learning organizations. The course encourages education professionals to explore methods of virtual lesson delivery and online assessment through direct instruction, discussion, and project development.

**Prerequisite(s):** Graduate Admissions status

**TED 8590 TEACHING AND LEARNING IN DIGITAL ENVIRONMENTS (3 credits)**

This course is an introduction to future-ready information, digital learning environments, and instructional technologies for use with children and youth. Course will cover a diverse array of technical literacies that serve as content and skill goals for today's children and youth in P-12 schools and other learning environments.

**TED 8610 TEACHING OF WRITING THROUGHOUT THE CURRICULUM (3 credits)**

This course will develop candidates' understanding of the various aspects of writing to integrate throughout the content areas. Candidates will acquire and apply a common language for teaching and assessing student writing and investigate the varied ways writing genres extend throughout the curriculum. Candidates will examine research-supported writing instruction and the role write-to-learn strategies play in supporting diverse students in accessing and understanding content-specific information.

**Prerequisite(s):** Graduate status.

**TED 8640 OPEN EDUCATIONAL RESOURCES FOR P-12 TEACHERS (3 credits)**

TED 8640 Open Educational Resources for P-12 Teachers affords opportunities to study, evaluate, plan, and implement the open educational resources (OERs) to meet state, district, or diocese content standards and support equitable remote learning experiences. Graduate candidates will develop respective P-12 grade- and/or content-appropriate content/curriculum utilizing OERs focused on STEM (Science, Technology, Engineering, and Mathematics) education and the use of technology integration to foster effective teaching and learning.

**TED 8650 CHILDREN'S LITERATURE AND EDUCATION (3 credits)**

Candidates in this graduate course will explore story, poetry, drama, and informational materials for elementary students with an emphasis on methods for including literature in school curricula with an awareness of diverse children's lives, discourses, and understandings. Examines current issues, recent materials, and the theoretical and research base of this field to develop meaningful and creative learning, literacy, and library experiences for children.

**TED 8660 YOUNG ADULT LITERATURE (3 credits)**

This course extends candidates' knowledge of literature for young adults. The course addresses current trends in the genre and engages candidates in activities that support pedagogies in basic, visual, information and cultural literacies.

**Prerequisite(s):** Graduate status

**TED 8695 LITERACY AND LEARNING (3 credits)**

This course examines ways in which reading and writing can facilitate student learning in content areas studies (e.g., science, social studies, physical education, art, music, and math). The main focus is on teaching practices that engage students and contribute to their learning, integrating their background knowledge and cultural experiences with content area literacy. (Cross-listed with TED 3690).

**TED 8700 ELEMENTARY EDUCATION CAPSTONE (3 credits)**

This course is designed as a required, final capstone course for Elementary Education graduate students to be taken in the last nine hours of the Master of Science program. A grade of B or better must be received in TED 8700 to show satisfactory completion of the course and for program completion.

**Prerequisite(s):** Permission of the Elementary Education Program Chair. Not open to non-degree graduate students.

**TED 8710 RESEARCH AND INQUIRY (3 credits)**

The purpose of this course is for candidates to gain an overview and understanding of questioning, inquiry, and research strategies used in future ready P-12 libraries in order to ensure access to reference services and resources in a variety of formats and to design and support information literacy and inquiry-based instruction for all members of the learning community.

**TED 8720 INTRODUCTION TO INSTRUCTIONAL COACHING IN PK-12 EDUCATION (3 credits)**

This course examines the prominent coaching models used in PK-12 schools (i.e. teacher-centered coaching, student-centered coaching, cognitive coaching, transformational coaching). Candidates completing this course will be able to: develop an understanding of best practices in coaching, create a common lexicon for the role of an instructional coach, engage in the coaching cycle, and create a personal vision for their work as a coach. Candidates will engage in a field based experience to apply their learning.

**Prerequisite(s):** Graduate Status

**TED 8726 SPECIAL LIBRARIES AND INFORMATION AGENCIES (3 credits)**

Candidates will demonstrate an understanding of the major types of 21st Century special libraries and information agencies. Candidates will demonstrate an understanding of social and political environments, clientele, services, collections, physical settings, financing and staffing, and future trends in the special libraries and information agencies. (Cross-listed with TED 4720).

**TED 8730 PK-12 CAPSTONE (3 credits)**

The PK-12 Graduate Capstone course provides candidates with an opportunity to apply the knowledge, skills, and dispositions acquired during their program to content specific synthesis activities in their respective disciplines. Students will demonstrate their ability to integrate information from program coursework in the design, development and presentation of a final capstone project related to teaching and learning.

**Prerequisite(s):** Graduate standing. Limited to those in online pathways. Not open to non-degree graduate students.

**TED 8740 ORGANIZATION OF INFORMATION (3 credits)**

Candidates will demonstrate the ability to integrate the legal and ethical standards of their discipline in ensuring access to information and ideas for a diverse array of learners in schools and communities. This course also addresses current theory and best practice in descriptive and subject cataloging and classification of information resources that align with school library standards and guidelines.

**TED 8746 ORGANIZATION OF INFORMATION (3 credits)**

Candidates will demonstrate a basic understanding of the theories, concepts and activities of descriptive and subject cataloging and classification procedures of information resources in 21st Century libraries and information agencies.

**TED 8750 OXBOW WRITING PROJECT (3 credits)**

Oxbow Writing Project summer institute immerses K-16 educators in writing pedagogy via their own writing, presentations about writing and pedagogy, reading and discussing professional literature, designing and implementing an in-depth inquiry project, and developing leadership strengths. Oxbow is a National Writing Project Site. (Cross-listed with ENGL 8750).

**Prerequisite(s):** Acceptance into Oxbow Writing Project Summer Institute

**TED 8760 MANAGING COLLECTIONS IN LIBRARIES AND INFORMATION AGENCIES (3 credits)**

Candidates will demonstrate an understanding of the theories, concepts and activities integral to proactive collection management in 21st Century libraries and information agencies. Candidates will demonstrate an understanding of community analysis, collection analysis, and the ability to conduct critical evaluations of a diverse array of information resources.

**TED 8770 INTEGRATING TECHNOLOGY INTO INSTRUCTIONAL DESIGN (3 credits)**

The purpose of this course is to introduce participants to effective methods for the integration of educational media into instructional design and provides participants (1) knowledge of broad instructional design theories and models with a concentration on constructivism, (2) experience in designing instruction that effectively integrates technology into the teaching-learning process, and (3) experience in producing instructional media. The course is intended to provide fundamentals in the selection, evaluation, production, application and utilization of educational media. This course is designed for in-service library media or instructional technology specialists as well as regular classroom teachers.

**Prerequisite(s):** Graduate status

**TED 8780 FOUNDATIONAL SKILLS OF EARLY LITERACY (3 credits)**

This course builds knowledge and instructional practices focused on early literacy foundational skills. With a focus on the components of foundational skills: (print concepts, phonological awareness, phonics and word recognition, and fluency) candidates will be able to identify concrete strategies to support Pk-3 student learning and practice. The course helps to build knowledge and skills of evidence-based early literacy instruction and provides resources to support teachers' planning and instruction.

**Prerequisite(s):** Graduate Standing

**TED 8800 MULTICULTURAL LITERATURE FOR CHILDREN AND YOUTH (3 credits)**

This is designed as a graduate-level course dealing with utilization of literary materials representing authors and content from multiple perspectives, particularly authors whose cultural and ethnic backgrounds differ from the mainstream.

**TED 8810 STEM IN EARLY CHILDHOOD EDUCATION: CURRICULUM AND RESEARCH (3 credits)**

This course will explore theoretical and foundational pedagogical strategies in early childhood education used to deliver integrative STEM education in the preK-12 setting. In order to understand the research and practice of STEM disciplines in preK-12, it is necessary to examine the social, cultural, political, and functional aspects that influence them. Candidates will investigate the nature of STEM education, Early Childhood Education (ECE) pedagogy and perspectives of learning, content knowledge and dispositions for educators of STEM topics, and issues of access and equity for STEM education through literature, discussion, and practice. This course includes a community outreach component in which candidates will use qualitative methods to observe class topics in public settings. (Cross-listed with STEM 8810)

**Prerequisite(s):** Graduate status

**TED 8816 PRINCIPLES AND PHILOSOPHY OF INTEGRATING CAREER AND ACADEMIC EDUCATION (3 credits)**

This course presents the philosophies and principles/practices underlying how schools can better prepare students for the workplaces of the future with emphasis on the integration of career education within broader academic preparation. The roles and responsibilities of teachers, counselors, and administrators in implementing integrated approaches will be examined. (Cross-listed with TED 4810).

**TED 8820 CAPSTONE IN STEM EDUCATION (3 credits)**

This course will prepare graduate students for the integration, articulation, and differentiation of curriculum and instruction in and between the STEM core areas of Science, Technology, Engineering, and Mathematics. Special emphasis will be on using the STEM core content to help provide applications and context to existing science and mathematics curriculum and instruction and on providing leadership in developing curriculum for mathematics and science dependent courses in engineering and technology.

**Prerequisite(s):** The student must be enrolled in one of the following concentrations: STEM, mathematics, science, technology; and be enrolled in the last six hours of their program of study. Not open to non-degree graduate students.

**TED 8830 LEADERSHIP AND MANAGEMENT IN SCHOOL LIBRARIES (3 credits)**

The course explores best practice for effective leadership and management of 21st Century school libraries. Candidates will gain a comprehensive knowledge of the theories, policies and processes involved in directing a school library in support of the personal and academic success of P-12 students. Candidates will explore and employ ethical codes of conduct in their profession to ensure school libraries meet the needs of their diverse array of patrons.

**TED 8840 ENGINEERING EDUCATION EXTERNSHIP (3 credits)**

This graduate course will address the best practice of effective teaching and learning in Engineering Education through professional collaboration between K-12 STEM (Science, Technology, Engineering, and Mathematics) teachers and practicing engineering professionals. K-12 STEM teachers, as graduate students in the course, will learn about and address real-world applications and career opportunities in STEM education through the externship. K-12 STEM teachers will research and develop authentic, experiential learning opportunities and projects for the classroom through course supports associated with lecture, discussion, and partnerships with practicing engineering professionals. The externship will be integral to the K-12 STEM teachers' experiences and work in this course, as the course models effective professional collaboration founded on experience, knowledge, and skills to achieve a curriculum enhancement goal. (Cross-listed with STEM 8840).

**Prerequisite(s):** Graduate status. Not open to non-degree graduate students.

**TED 8850 PROFESSIONAL COLLABORATION (3 credits)**

This course is designed to prepare candidates to work in collaboration with other professionals and parents to create a learning environment that enhances the potential for academic success and improvement of instructional practices. The focus will be on collaborative problem solving. (Cross-listed with SPED 8980).

**Prerequisite(s):** Admission to Graduate College.

**TED 8856 COORDINATION TECHNIQUES IN WORK-BASED LEARNING (3 credits)**

This course reviews responsibilities and techniques of coordination for the work-based learning teacher-coordinator and/or work-based learning coordinator, with special emphasis on administration of the part-time cooperative program and analysis of the laws and regulations governing this program. (Cross-listed with TED 4850).

**TED 8860 INVENTION & INNOVATION IN ENGINEERING EDUCATION (3 credits)**

This course will address emerging trends in STEM education for in-service K-12 STEM teachers with a focus on the use of engineering education practices in teaching and learning content. STEM teachers will receive applicable, hands-on, classroom-ready experiences through lecture, professional instruction, and projects that will emphasize product design and creation through the Engineering Design Process. The Engineering Design Process will be central to the candidates' experiences in this course and will be used by the candidates to develop curriculum utilizing emerging trends to supplement current course content and standards. Interdisciplinary planning will be central to the course. (Cross-listed with STEM 8860).

**Prerequisite(s):** Graduate status is required.

**TED 8880 LEADERSHIP IN EARLY CHILDHOOD EDUCATION (3 credits)**

This course seeks to prepare candidates with leadership skills in the early childhood field that will empower them to initiate and implement changes in programs serving young children and families. Candidates will explore and apply frameworks of leadership and analyze policy, governance, and power structures that can impact change. Candidates will also learn effective advocacy skills to positively influence policies and practices in program and governance structures. Lastly, candidates will examine approaches for developing new leaders in early childhood education through reflective supervision and mentorship.

**Prerequisite(s):** Graduate status.

**TED 8900 SECONDARY EDUCATION GRADUATE CAPSTONE (3 credits)**

The Secondary Education Graduate Capstone course provides candidates with an opportunity to apply the knowledge, skills, and dispositions acquired during their program to content specific synthesis activities in their respective disciplines. Candidates will demonstrate their ability to integrate information from program coursework in the design, development and presentation of a final capstone project related to teaching and learning in 21st Century educational environments.

**Prerequisite(s):** 30 credit hours towards degree completion; Permission required by Program Advisor. Not open to non-degree graduate students.

**TED 8970 INDEPENDENT STUDY (1-3 credits)**

This is a specially designed course taken under the supervision of a graduate faculty member to accommodate the student who has identified a focus of study not currently available in the departmental offerings and who has demonstrated capability for working independently.

**Prerequisite(s):** Permission of Department and Graduate Faculty member.

**TED 8980 PRACTICUM: VARIOUS CONTENT AREAS (1-6 credits)**

This course is designed to provide school professionals with a guided, supervised, field experience that will develop and enhance the knowledge, skills, and dispositions requisite of a successful educational practitioner.

**Prerequisite(s):** Prerequisites for the course will vary, depending on the content/discipline area. See syllabus for specific discipline area.

**TED 8990 THESIS (1-6 credits)**

This course is an independent research project completed under the direction of a thesis advisor and required of all candidates pursuing a Master of Science with Thesis option.

**Prerequisite(s):** Completion of Selective Retention and approval of advisor. Not open to non-degree graduate students.

**TED 9100 THEORIES, MODELS, AND PRACTICES OF LITERACY (3 credits)**

This course helps candidates develop a framework about the theories, models, practices, processes, and related research associated with literacy. The content looks across grade levels and student populations, and across social and cultural contexts in an examination of factors that impact theories and processes of literacy.

**Prerequisite(s):** Graduate status.

**TED 9110 PRINCIPLES AND PRACTICES FOR TEACHING READERS (3 credits)**

This foundational reading course is to provide candidates with a broad understanding of the core reading principles (phonological awareness, phonemic awareness, fluency, vocabulary and comprehension) as they relate to research, evidence-based practices and diverse students' literacy development. Candidates will also explore educational trends and shifts in literacy policies and approaches, and the impact these trends and shifts have on PK-12 classroom practices.

**TED 9120 GRADUATE IN-SERVICE TEACHING (3 credits)**

This is a graduate experience for in-service teachers pursuing teacher certification. Candidates must successfully complete a minimum of 100 hours (or per program of study) of field experience prior to completing their in-service teaching experience.

**Prerequisite(s):** Graduate standing. Permission. Applications go to the Office of Field Experiences. Not open to non-degree graduate students.

**TED 9130 ASSESSMENTS AND INTERVENTIONS - ELEMENTARY (3 credits)**

This course is designed for graduate candidates enrolled in the Literacy Masters or Reading Specialist endorsement program. The purpose of this course is to develop an understanding of theory and research as it relates to assessment and evaluation and instructional approaches that support reading development. This knowledge is applied through a practicum experience with elementary students in which candidates integrate knowledge and practices related to assessment and evaluation of readers' strengths and needs.

**TED 9140 ASSESSMENT AND INTERVENTION - SECONDARY (3 credits)**

This course is designed for graduate candidates in literacy endorsement and Master's programs. The purpose of this course is to develop an understanding of the theory and research driving assessment and evaluation and instructional approaches as they relate to reading differences for middle and high school students. Included in this course is knowledge about the role and responsibility of a literacy leader with regard to coaching, mentoring, supervision, and evaluation of a reading program. Application of this information is demonstrated through a practicum experience with middle and high school students.

**Prerequisite(s):** TED 9100; TED 9110 concurrent with, or prior to TED 9140.

**TED 9180 LITERACY RESEARCH SEMINAR (3 credits)**

This course will enhance candidates' understanding and ability to critically examine, apply, and conduct current literacy research by developing understandings of how to (1) discuss historical trends in literacy research, (2) critically evaluate the designs, theories, methods and tools of literacy research, and (3) develop understandings of action research to plan and implement a preliminary literacy research study in their own context. Candidates will develop a research proposal that is grounded in theory and action research methods within their own learning context.

**TED 9190 LITERACY GRADUATE CAPSTONE (3 credits)**

The Literacy Program Graduate Capstone course provides candidates with an opportunity to synthesize the knowledge, skills, and dispositions acquired during their program to honor the interrelationships among classroom, school, sociocultural, and community contexts as they relate to diverse students' literacy development. Candidates will demonstrate their ability to integrate information from program coursework in the design, development, and presentation of a final capstone project related to teaching, learning, and literacy advocacy in 21st Century educational environments.

**Prerequisite(s):** This course is designed as a capstone event. Accordingly, students must have no more than 6 additional remaining credit hours of coursework. Permit to enroll required.

**TED 9200 CRITICAL PEDAGOGY: TEACHING FOR SOCIAL JUSTICE (3 credits)**

This course examines ways in which ideology, power, and culture intersect in P-12 educational settings. Undemocratic, inequitable, and oppressive structures are identified. Possibilities for democratic, equitable transformations are proposed.

**Prerequisite(s):** Graduate status

**STEM 8030 EVOLUTION: FROM GENOMES TO ECOSYSTEMS (3 credits)**

This course will prepare students to evaluate and discuss evolution as an underlying concept in all of biology. Further, it will provide a comprehensive overview of evolutionary processes related to the evolution of genomes, development, physiology, morphology, behavior, and ecosystems. (Cross-listed with BIOL 8030).

**Prerequisite(s):** Courses for graduate admission or equivalent, or with permission of instructor.

**STEM 8040 TOPICS IN MATHEMATICAL COMPUTING (3 credits)**

This course focuses on the current state-of-the-art technology that is either designed for or is uniquely suitable for teaching mathematics. (Cross-listed with MTCH 8040)

**Prerequisite(s):** MATH 2200 or equivalent or approval of instructor.

**STEM 8050 DATA-DRIVEN DECISION MAKING FOR EDUCATORS (3 credits)**

This course provides graduate students with hands-on experiences that model data-driven decision making for educational success in today's classroom. Students will learn how to create valid and reliable assessments; interpret standardized test data; build data models that identify student, classroom, program, and school needs; and in general, to systematically enhance educational decision making from a base of carefully collected information. Graduate students will also explore data collection and analysis strategies associated with technologies such as cloud computing, tablet computers, and smart phones. In addition, they will experience data-driven decision-making models that can be integrated into student lessons to not only teach more effectively with data-driven decisions, but also to help teach students about data-driven decision-making. The course will use real data sets and cases, in interesting, hands on and technology-rich activities, to help educators learn how to find the "educational story" represented by a set of carefully collected data points. (Cross-listed with TED 8050).

**Prerequisite(s):** Graduate Standing.

**STEM 8170 ECOSYSTEM ANALYSIS FOR EDUCATORS (3 credits)**

This course is designed for education graduate students who wish to take a field-based biology course that uses an interdisciplinary approach to understanding the ecosystem of the tallgrass prairie. This course engages graduate students in methods reflecting multidisciplinary STEM strategies (e.g. scientific inquiry, modeling, geographic information system mapping, etc.) associated with research taking place at the Glacier Creek Preserve. Graduate students completing this course will develop advanced knowledge of ecology, restoration ecology, and monitoring of prairie habitat restoration. Graduate students will focus on the technical, biogeochemical, ecological and cultural aspects of analyzing and restoring the prairie ecosystem and its various habitats. (Cross-listed with BIOL 8170)

**Prerequisite(s):** Graduate Standing or Permission from the Instructor.

**STEM 8300 STEM TEACHING METHODS FOR DEVICE DESIGN (3 credits)**

STEM Teaching in Biomechanics focuses on principles in teaching including teaching models (Problem-Based, Team-Based, Inquiry-Based teaching), student assessment, classroom logistics/organization, and device design through a mentorship project. (Cross-listed with BMKI 9301, BMCH 8300).

**STEM 8370 DATA VISUALIZATION AND MODELING FOR EDUCATORS (3 credits)**

In the growing context of data informed decisions there is a need to answer "what if" questions in a variety of decision-making situations, as well as to display data both visually and interactively. This course will provide foundational skills in data visualization and modeling for educational decision making and instruction. It draws upon key fundamentals in data visualization (representing data trends visually) as well as key strategies in data modeling (interactive representations to explore possible outcomes). The course also explores the use of visualization and modeling technologies as well as assisting student learning with these tools. (Cross-listed with TED 8370).

**STEM 8410 IMPROVEMENT OF INSTRUCTION: SPECIAL TOPICS (3 credits)**

This course provides an in-depth study of instructional theory, research, and methodology designed to extend teachers' professional knowledge base and enhance their pedagogical skills. When offered, a course may be limited to improvement of instruction in a selected subject area. (Cross-listed with TED 8410).

**STEM 8420 TRENDS AND TEACHING STRATEGIES IN SCIENCE EDUCATION (3 credits)**

This course is designed for the graduate candidate in the Department of Teacher Education whose study program emphasis is in the area of science education. The course will describe and analyze past and present trends in science education, including curricula, teaching-learning strategies, the laboratory and instructional materials. The course focus will be K-12 and as such is meant to serve both elementary and secondary graduate candidates. (Cross-listed with TED 8420).

**Prerequisite(s):** Graduate standing.

**STEM 8430 SCHOOL CURRICULUM PLANNING (3 credits)**

This course is designed to provide advanced degree candidates with an understanding of the theory, principles, and practices utilized in curriculum planning in American schools. This course focuses on the principles and practices of effective curriculum planning and teachers' part in these processes as curriculum developers. (Cross-listed with TED 8430).

**STEM 8450 BIOLOGY EDUCATION RESEARCH METHODS (3 credits)**

In this course, students will learn the methods of conducting pedagogical research in Biology, understand how people learn the concepts, practices, and ways of thinking in science and engineering; understand the nature and development of expertise in a discipline; help identify and measure appropriate learning objectives and instructional approaches that advance students toward those objectives; contribute to the knowledge base in a way that can guide the translation of statistical findings to classroom practice; and identify approaches to make science and engineering education broad and inclusive. Students will work with live data sets to evaluate effective pedagogical approaches in the biology classroom of various audiences (K-16).

**STEM 8510 AEROSPACE EDUCATION WORKSHOP (3 credits)**

This course will focus on aviation and space education and its impact on society. It will seek to communicate knowledge, impart skill, and develop attitudes relative to the scientific, engineering and technical as well as the social, economic and political aspects of aviation and space flight efforts. (Cross-listed with TED 8510, AVN 8510)

**Prerequisite(s):** Graduate standing.

**STEM 8530 INSTRUCTIONAL DESIGN STRATEGIES FOR STEAM EDUCATORS (3 credits)**

This course is designed to provide graduate candidates with the opportunity to enhance interdisciplinary instructional strategies, curricular understanding, and lesson preparation in the areas of science, technology, engineering, the arts, and mathematics (STEAM) through analysis and reflective practices in STEAM. This course provides hands-on experiences that model STEAM integration techniques, including how to effectively engage with community agencies and partners to bring STEAM into the classroom. This course emphasizes not only the technical aspects of STEM, but also the creativity and innovation that arts integration can add to enhance STEM curriculum. Teacher professionals will be provided with tools, resources, and strategies to help them explore and enhance current, new, or supplemental curriculum activities that will enhance STEAM learning, student engagement, and motivation. (Cross-listed with TED 8530)

**Prerequisite(s):** This course includes both teacher education and STEAM related topics and therefore fits into both TED and STEM program coursework.

**STEM 8810 STEM IN EARLY CHILDHOOD EDUCATION: CURRICULUM AND RESEARCH (3 credits)**

This course will explore theoretical and foundational pedagogical strategies in early childhood education used to deliver integrative STEM education in the preK-12 setting. In order to understand the research and practice of STEM disciplines in preK-12, it is necessary to examine the social, cultural, political, and functional aspects that influence them. Candidates will investigate the nature of STEM education, Early Childhood Education (ECE) pedagogy and perspectives of learning, content knowledge and dispositions for educators of STEM topics, and issues of access and equity for STEM education through literature, discussion, and practice. This course includes a community outreach component in which candidates will use qualitative methods to observe class topics in public settings. (Cross-listed with TED 8810)

**Prerequisite(s):** Graduate status

**STEM 8840 ENGINEERING EDUCATION EXTERNSHIP (3 credits)**

This graduate course will address the best practice of effective teaching and learning in Engineering Education through professional collaboration between K-12 STEM (Science, Technology, Engineering, and Mathematics) teachers and practicing engineering professionals. K-12 STEM teachers, as graduate students in the course, will learn about and address real-world applications and career opportunities in STEM education through the externship. K-12 STEM teachers will research and develop authentic, experiential learning opportunities and projects for the classroom through course supports associated with lecture, discussion, and partnerships with practicing engineering professionals. The externship will be integral to the K-12 STEM teachers' experiences and work in this course, as the course models effective professional collaboration founded on experience, knowledge, and skills to achieve a curriculum enhancement goal. (Cross-listed with TED 8840).

**Prerequisite(s):** Graduate status. Not open to non-degree graduate students.

**STEM 8860 INVENTION & INNOVATION IN ENGINEERING EDUCATION (3 credits)**

This course will address emerging trends in STEM education for in-service K-12 STEM teachers with a focus on the use of engineering education practices in teaching and learning content. STEM teachers will receive applicable, hands-on, classroom-ready experiences through lecture, professional instruction, and projects that will emphasize product design and creation through the Engineering Design Process. The Engineering Design Process will be central to the candidates' experiences in this course and will be used by the candidates to develop curriculum utilizing emerging trends to supplement current course content and standards. Interdisciplinary planning will be central to the course. (Cross-listed with TED 8860)

**Prerequisite(s):** Graduate status is required.

**STEM 8910 CAPSTONE IN CS EDUCATION (3 credits)**

This course will allow graduate students, as an individual or as part of a group, to study and analyze specific problems related to teaching computing in schools. Projects will be concerned with the curriculum and/or instruction of computing and should address a broad scope of application rather than a specific level. (Cross-listed with CSTE 8910).

**Prerequisite(s):** Student must have completed 21 hours in the Masters of CS Education program.