Self-Study document

for the

UNK Science/Math Education M.S.Ed. Program

Academic Program Review

April 13-14, 2015

prepared by

Christopher L. Exstrom, Program Director
& Professor of Chemistry

Table of Contents

1. General Program Characteristics

The University of Nebraska at Kearney (UNK) Science/Math Education M.S.Ed. Program (abbreviated Sci/Math Ed) is an interdisciplinary program designed for in-service grade 7-12 math and science teachers who wish to strengthen and broaden their background in these teaching fields. The program consists of 36 credit-hours of courses and is non-thesis based. The structure is a hybrid between that of a traditional Curriculum & Instruction Master's program and that of a traditional math or science content Master's program. Students take courses in a minimum of four departments, Teacher Education (TE) plus at least three from Biology (BIOL), Chemistry (CHEM), Mathematics & Statistics (MATH), and Physics & Physical Science (PHYS) while completing a 12-credit hour emphasis in one of the last four areas. A detailed degree program description is given in section 2. Initiated in the 1970's as the Science Education M.S.Ed. Program, it served cohorts of Nebraska teachers in face-to-face classes on the UNK campus and at other sites around the state as course demand warranted. In light of dwindling enrollments through the 1990's and 2000's, **the program was retooled as a completely online program in 2011.** In doing so, MATH was added as one of the participating departments and the program was renamed Science/Math Education. Since then, administrative priorities have been the development and growth of science/math content curricula and student population base to support the offering of major emphases in all four areas along with the continuing development of assessment tools and measures. **Since the 2011-2012 academic year, the number of active students has risen from 29 to 55 while credit hour production has increased from 167 to 385 (2013-14) with over 500 credit hours expected in 2014-15.** This is the first Sci/Math Ed academic program review.

1.1 Accreditations

UNK is accredited by the Higher Learning Commission (HLC) of the North Central Association of Colleges and Schools (NCA). The Science/Math Education M.S.Ed. Program has special accreditations from the National Council for the Accreditation of Teacher Education (NCATE) and the Nebraska Department of Education.

1.2 Mission Statement

The mission of the Science/Math Education program is to improve classroom instruction by providing a flexible yet rigorous program of study within an area of endorsement (Biology, Chemistry, Mathematics, Physics, or Physical Science). Candidates who successfully complete the degree demonstrate in-depth pedagogical and content knowledge within their area of specialization, possess broad knowledge of content in multiple disciplines, and apply their knowledge to the curriculum in order to improve teaching and student learning.

1.3 Links to the UNK Strategic Plan

Objective 5 of the Phase I UNK Strategic Plan states that UNK will "*offer graduate programs that are grounded in academic strength and the meet changing needs*" and will

- *Systematically assess citizens' educational and career development needs.*
- *Ensure that established programs have sufficient support to sustain academic quality and relevance to the needs of the state.*
- *Encourage development of new programs which, within available resources, will deliver high quality instruction responding to demonstrated need.*

At the campus level, UNK has established an eCampus division to provide administrative support for new and existing online programs in line with the three objective points above. In this context, the Sci/Math Ed program is particularly well-suited for addressing the needs of teachers in greater rural Nebraska and similar regions nationwide for the following reasons:

- In smaller, rural school districts, math and science teachers must often teach multiple subjects. Unlike traditional M.A. and M.S. programs, the Sci/Math Ed program requires that students take courses from multiple science/math departments, providing the opportunity for a teacher to strengthen his or her background in most or all subjects that he or she teaches.

- Many teachers in smaller, rural school districts have broad-based field endorsements without sufficient depth in any one subject for the teacher to necessarily qualify for a traditional math or science M.A. or M.S. program. At the same time, the Curriculum & Instruction M.A.Ed. programs for which these teachers would more likely qualify do not contain the math and/or science content that they may be seeking. The Sci/Math Ed program can offer more flexibility in evaluating applicants' science/math background while providing an attractive combination of science/math content, curriculum, and pedagogy courses.

1.4 Organization Structure, Governance, and Leadership

1.4.1 Organization Structure

The Science/Math Education M.S.Ed. Degree is awarded from the UNK Graduate College with approval from the Dean of Graduate Studies (DGS). The Sci/Math Ed Program Director (PD) reports to the DGS. The Sci/Math Ed Program is housed in the College of Natural & Social Sciences which is overseen by the Dean of Natural & Social Sciences (DNSS). There are no dedicated faculty/staff positions or office/classroom space dedicated to the Sci/Math Ed program. Because the PD happens to be a Professor of Chemistry, the CHEM department provides office space and donates secretarial support. Course support and instruction is provided by the Chairs and faculty of the BIOL, CHEM, MATH, and PHYS departments who report to the DNSS. In a similar fashion, TE course support and instruction is provided by the Chair and faculty of the TE department who report to the Dean of the College of Education (DCE). The DCE also provides institutional internal approval for all matters pertaining to NCATE and Nebraska Department of Education accreditation.

1.4.1.1 Changes to the Organization Structure since 2010

The original Science Education M.S.Ed. Program was housed in the Department of Biology and the Chair of that department was in the approval chain-of-command above the PD. Upon retooling into a completely online program in 2010, MATH was added as a participating department and emphasis area, and the program was renamed Science/Math Education. In the summer of 2012, the program was removed from the Department of Biology and established as a stand-alone interdepartmental program with the PD reporting directly to the DGS.

1.4.2 Governance

The legislative body of the Sci/Math Ed program is the Graduate Program Committee (GPC) that consists of five members, one from each of the participating departments. Members are appointed on an

annual basis by the DGS with terms running from May 1 – April 30. GPC memberships are uncompensated faculty service positions. Current GPC members are:

- Christopher Exstrom (GPC Chair, Sci/Math Ed PD & Professor of Chemistry)
- Pari Ford (Assistant Professor of Mathematics)
- Julie Shaffer (Professor of Biology)
- Jane Strawhecker (Professor of Teacher Education)
- Kenneth Trantham (Associate Professor & Chair, Dept. of Physics & Physical Science)

In addition to approving all program curricular, administrative, and assessment policy, the GPC serves as the evaluating committee for applications for admission into the program and all students' comprehensive exams taken prior to graduation. Each GPC member also serves co-academic advisor (along with the PD) to each student in their respective emphasis area and is the liaison to their respective departments for communicating information about and developments in the Sci/Math Ed program.

1.4.3 Leadership

The Program Director (PD) manages the day-to-day operations of the program. Since it went online the program has had two directors:

- Kerri Farnsworth-Hoback, Associate Professor of Biology (2010-2012) – resigned her UNK faculty position in July 2014
- Christopher Exstrom, Professor of Chemistry (April 2012 – present)

There is no faculty workload credit – the current PD teaches 9 workload hours per week (which translates into 11-12 contact hours because of 2/3 credit given for chemistry labs), which is in line with the UNK faculty workload policy for scholarly active faculty members. The PD does receive an overload stipend equal to 7.5% of his annual faculty base salary. This is paid in a 9-over-12 month fashion. Duties and responsibilities of the PD include the following:

- Approve degree program change and advancement paperwork (Change of Program of Study, Candidacy applications, and Completion of Comprehensive Exam)
- Evaluate and approve course transfers from other institutions
- Coordinate the admission application process. The PD distributes application materials to the GPC and provides a background summary and application recommendation for each candidate.
- Manage the Sci/Math Ed differential tuition expenditure account and all associated paperwork
- Coordinate the delivery of comprehensive exams. This includes the compiling and delivery of written test questions (usually to remote proctors) and collection of answers, and scheduling of the written and oral tests
- Serve as co-academic advisor for all Sci/Math Ed students. The PD handles matters pertaining to degree program progress and more specific advising about online CHEM courses.

- Serve as the webmaster for the Sci/Math Ed website: http://www.unk.edu/academics/science-math-ed
- Work with the UNK eCampus office to develop and implement marketing initiatives (see section 5.4)
- Contact prospective students (218 between April 2012 and January 2015) in response to direct inquiries and leads provided by the UNK eCampus office and the University of Nebraska Online Worldwide office. Many of these contacts lead to extended phone or e-mail exchanges.

2. Degree Program and Curriculum

2.1 Sci/Math Ed Degree Program Structure

The degree program is divided into two sections, Professional Components and Academic Components. Each of these is divided into three categories:

A. Professional Components (9 hours required)
1. Curriculum Course (3 hours)
   - BIOL 876 Natural Science Curriculum - 3 hours
2. Research Course (3 hours)
   - TE 800 Educational Research - 3 hours
3. Pedagogy Course (3 hours) Take 1 course from:
   - TE 804 Curriculum Development in Multicultural Education - 3 hours
   - TE 807P Multiple Intelligences: Theories Into Practice - 3 hours
   - TE 812P Alternative Assessments of Student Performance: Theory Into Practice - 3 hours
   - TE 886P Technology Tools for Teachers - 3 hours

B. Academic Components (27 required)
1. Major Emphasis (12 hours)
   - 12 hours in an area of endorsement (Biology, Chemistry, Mathematics, or Physics/Physical Science)
2. Supporting Courses (9 hours)
   - A minimum of 9 hours in Biology, Chemistry, Earth Science, Mathematics, Physics, or Physical Science outside the major emphasis. Courses must be taken in at least two disciplines. These courses will be selected to meet student needs as indicated by previous course work and teaching duties.

3. Electives (6 hours)
   - Approved by the advisor prior to enrollment by the student

Additional, degree candidates must complete a Comprehensive Exam that consists of written and oral portions. Exam questions are determined by the GPC and may cover topics from the major emphasis, supporting courses, pedagogy, and research. The written exam is administered by a proctor (identified by the candidate). The GPC conducts the oral exam in person or by conference phone; the oral exam may include questions designed to follow up on written answers but may also introduce new questions as necessary to judge the candidate's knowledge.

2.2 Courses taught

There are five departments that contribute online graduate courses to the Sci/Math Ed program. Courses that Sci/Math Ed students have taken since the fall 2011 semester are listed below by department. Full course descriptions can be found in the UNK Graduate Catalog:

http://aaunk.unk.edu/gradcatalogs/current/crs/crstoc.asp

Biology (BIOL). Because of their large online Biology M.S. program, the BIOL department offers numerous content classes for which Sci/Math Ed students are eligible to take. Traditionally, the required curriculum course, BIOL 876 (Natural Science Curriculum), has been taught out of the BIOL department. However, the one faculty member qualified to teach the course has resigned her UNK faculty position and the BIOL department is unable to replace her with a biology education faculty member. Relocation of this or a similar curriculum course to another department is area of concern for the Sci/Math Ed program moving forward and is discussed in Section 9.

- BIOL 802 - Organic Evolution - 3 hours
- BIOL 804 - Evolution of Epidemics - 3 hours
- BIOL 811 - Scientific Illustration - 3 hours
- BIOL 813 - Issues in Bioethics - 3 hours
- BIOL 815 - Great Plains Heritage - 3 hours
- BIOL 820 – Introduction to Graduate Studies – 3 hours **(starting in fall 2015, Sci/Math Ed students are no longer eligible to take this)**
- BIOL 823 - Environmental Biology - 3 hours
- BIOL 824 - Principles of Ecology - 3 hours
- BIOL 827 - Biological Statistics - 3 hours
- BIOL 828 - Human Evolution - 3 hours
- BIOL 829 - Ecological Anthropology - 2 hours
- BIOL 830P - Special Topics in Biology - 1-3 hours
- BIOL 834 - Conservation Biology - 3 hours
- BIOL 836 - Biology of Size - 3 hours
- BIOL 838 - Essential Human Anatomy - 3 hours
- BIOL 839 - Human Physiological Systems - 3 hours
- BIOL 840 - Infectious Diseases - 3 hours
- BIOL 845 - Forensic Biology - 3 hours
- BIOL 846 - Cancer Biology - 3 hours
- BIOL 853 - Genome Evolution - 3 hours
- BIOL 854 - Biological Application of GIS - 3 hours
- BIOL 857 - Human Histology - 3 hours
- BIOL 861P – Human Genetics – 3 hours
- BIOL 863 - Biological Perspectives - 3 hours
- BIOL 866 - Functional Morphology - 3 hours
- BIOL 869 - Conservation of Birds and Mammals - 3 hours
- BIOL 870 - Insect Biology - 3 hours
- BIOL 876 - Natural Science Curriculum - 3 hours **(is the required curriculum course in the Sci/Math Ed program)**
- BIOL 881 - Current Issues in Biology - 1 hour **(may only be used in the Electives category)**
- BIOL 883 - Aquatic Trophic Ecology - 3 hours
- BIOL 884 - Freshwater Management Techniques - 3 hours
- BIOL 886 - Sexual Selection - 1 hour
- BIOL 887 - Fisheries Ecology - 3 hours

Chemistry (CHEM). Since its first online graduate course in 2007, the CHEM department expanded its offerings to support a full 12-hour emphasis in 2011 and has recently established a more extensive course rotation shown below.

- CHEM 805 - Chemical Management & Safety for HS Teachers - 1 hour (summer of odd years)
- CHEM 810 - Environmental Chemistry for High School Teachers - 3 hours (summer of even years)
- CHEM 820 - Inorganic Chemistry I for High School Teachers - 1-4 hours (spring of odd years)
- CHEM 821 - Inorganic Chemistry II for High School Teachers - 1-4 hours (spring of even years)

- CHEM 855 - Biochemistry for High School Teachers - 3 hours (summer of even years)
- CHEM 864 - Analytical Chemistry for High School Teachers - 3 hours (fall of odd years)
- CHEM 899 - Special Topics - 1-3 hours
  (Organic Chemistry for High School Teachers, 3 hours, summer of odd years
  Chemical Kinetics for High School Teachers, 2 hours, summer of odd years)

Mathematics (MATH). Formerly a participating department in the online Curriculum & Instruction M.A.Ed. program, due to staffing and workload issues, the MATH department discontinued online course offerings but started developing new courses for the Sci/Math Ed program for the summer 2014 term. All courses are listed under the MATH 871 Topics in Math heading and are currently offered during the summer. To date, 15 credit hours of courses have been developed.

- MATH 815 – Topics in Discrete Mathematics for the Secondary School Teacher – 3 hours (offered summer 2012)
- MATH 871 - Topics in Math - 3 hours
  (Modern Algebra with Geometry, offered summer 2014
  Topics in Difference Equations, offered summer 2014
  Mathematical Knowledge for Teachers, offered summer 2014
  Algebraic Geometry, to be offered summer 2015
  Current Research in Math Education, to be offered summer 2015)

Physics & Physical Science (PHYS). The PHYS department has established a 6-course/4-year rotation – one course every summer and one course every other fall semester -- which is sufficient to support a combined physics/physical science emphasis area and enable students in this area to finish their degree within three years.

- PHYS 800 - Advanced Physical Science - 3 hours (offered in fall 2013)
- PHYS 801 - Earth Science for High School Teachers - 3 hours (offered in summer 2014)
- PHYS 809 - Meteorology - 3 hours (to be offered summer 2015)
- PHYS 810P - Mathematical Techniques in Physics - 4 hours (to be offered in fall 2015)
- PHYS 811 - Astronomy for High School Teachers - 3 hours (offered in summer 2012)
- PHYS 813 - Introduction to Analog and Digital Electronics - 4 hours (offered in summer 2013)

The following courses have been taught online in the past but are not in the current rotation:

- PHYS 846P - Modern Physics for High School Teachers I - 4 hours
- PHYS 847 - Modern Physics for High School Teachers II - 4 hours

Teacher Education (TE). Because of their large online Curriculum & Instruction M.A.Ed. program, the TE department offers numerous content classes for which Sci/Math Ed students are eligible to take. TE 800 (Educational Research), the required research course, and at least one course that fulfills the pedagogy course requirement are offered every semester and summer.

- TE 800 - Educational Research - 3 hours
  (required for all Sci/Math Ed students)
- TE 803 - Philosophy of Education - 3 hours
- TE 804 - Curriculum Development in Multicultural Education - 3 hours
  (fulfills the pedagogy course requirement)
- TE 805P - Overview of Assistive Technology - 3 hours

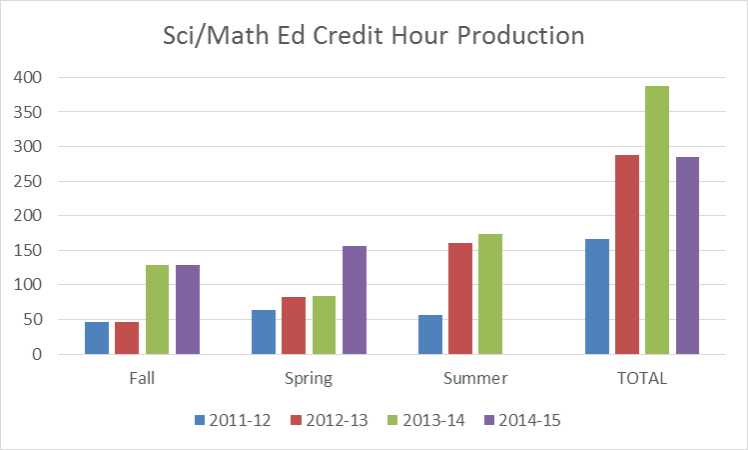
- TE 807P - Multiple Intelligences: Theories Into Practice - 3 hours **(fulfills the pedagogy course requirement)**
- TE 808P - Human Relations - 1-3 hours
- TE 809P - Curriculum Implementation - 3 hours
- TE 815P - The Effective Teacher: Enhancing Classroom Instruction - 3 hours
- TE 854 - Reading in the Content Areas - 3 hours
- TE 866 - Motivating the 21st Century Learner - 3 hours
- TE 877 - Developing Web-based Educational Environments - 3 hours
- TE 881 - Distance Education - 3 hours
- TE 886P - Technology Tools for Teachers - 3 hours **(fulfills the pedagogy course requirement)**
- TE 899P - Special Topics - 1-3 hour

2.3 Degrees Earned

	Science/Math Education M.S.Ed. Degrees Conferred by Year & Emphasis Area				
Year	**BIOL**	**CHEM**	**MATH**	**PHYS**	**Total**
2010-11	2	0	0	0	2
2011-12	1	1	1	1	4
2012-13	0	2	0	0	2
2013-14	4	3	3	3	13

2.4 Credit hours Generated

	2011-12	**2012-13**	**2013-14**	**2014-15 (through Spring enrollment)**
Fall	47	46	129	129
Spring	64	82	84	156
Summer	56	160	174	
TOTAL	**167**	**288**	**387**	**285**



3. Student performance measures

3.1 Assessment Learning Goals and Objectives

All UNK departments and programs are required to submit annual assessment reports *via* WEAVEonline to the UNK Director of Assessment who reports to the Senior Vice-Chancellor of Academic & Student Affairs. For the Sci/Math Ed program, the PD is responsible for compiling and submit the reports. Results are distributed to the GPC for discussion of possible curricular and administrative policy changes.

In the Sci/Math Ed program assessment structure, there are five learning goals and five student learning objectives:

- **Goal 1 – Content Knowledge.** Candidates demonstrate in-depth knowledge of their area of emphasis.
- **Goal 2 – Supporting Areas.** Candidates relate content from supporting science/math disciplines to their area of specialization.
- **Goal 3 – Pedagogy.** Candidates demonstrate in-depth knowledge of pedagogical methods to help all students learn.
- **Goal 4 – Pedagogical Content Knowledge.** Candidates apply their pedagogical content knowledge to the development of curriculum that facilitates student learning.
- **Goal 5 – Reflection.** Candidates make data-driven decisions about their instructional practice.
- **Student Learning Objective (SLO) 1 –** Candidates can apply the major concepts, principles, theories, and laws of their field of specialization in completing the oral and written comprehensive exam. ***Assessment tools:*** *Comprehensive Exam, Employer Survey**
- **SLO 2 –** Candidates can synthesize the interrelationships between concepts and processes in their field of specialization and those of other science/math fields in completing the written and oral comprehensive exam. ***Assessment tools:*** *Comprehensive Exam, Exit Survey*
- **SLO 3 –** Candidates can apply appropriate mathematics and statistics concepts to science topics. ***Assessment tools:*** *Comprehensive Exam, Capstone Project*, Employer Survey**
- **SLO 4 –** Candidates can evaluate current theories related to pedagogy and learning. ***Assessment tools:*** *Comprehensive Exam, Capstone Project*, Employer Survey*, Exit Survey*
- **SLO 5 –** Candidates can apply a variety of research-based instructional strategies to promote student learning. ***Assessment tools:*** *Capstone Project*, Employer Survey*, Exit Survey*

*currently in development

3.2 Description of Assessment Tools

Comprehensive Exam. The format of this is described in Section 2.1. The GPC serves as the evaluating body for the exam and assesses candidates according the rubric shown on page 35.

Exit Survey. This measures student values regarding their perceptions of the Sci/Math Ed program quality and its impact on furthering students' understanding of math/science content, pedagogical

techniques, and professional practices and values. This survey was developed as a common instrument to be used by all UNK online graduate programs that include a teacher education component and was first implemented in the fall 2012 semester. A results summary is given in Section 3.3.

Capstone Project (in development, plan to initiate in fall 2016). This will likely take the form of a 3-credit course (SMED 888) that is designed to culminate the student's experience in the Sci/Math Ed program by integrating educational research, curriculum design, science/math content application, and assessment. Based on a literature evaluation of a specific concept or problem in science/math teaching, the student will develop a new curricular unit, or redesign an existing one, to be implemented in a high school or middle school science/math course that the student is teaching that semester. This unit must apply science/math content from the student's Major Emphasis category courses and the student must assess the impact of the new/revised unit on student learning. An assessment rubric has been developed and is shown on page 36.

Employer Survey (in development, initiation date TBD). This is a common instrument that is being developed in conjunction with all UNK online graduate programs that include a teacher education component. The survey will be completed by employers (presumably department heads, principals, and superintendents) of teachers who graduated from the Sci/Math Ed program and will cover matters pertaining to learning environments, content knowledge, assessment, planning for instruction, instructional strategies, professional learning and ethical practice, and leadership and collaboration.

3.2.1 NCATE Assessment Plan Format

As stated in Section 1.1, the Sci/Math Ed program is accredited by NCATE. In conjunction with the other NCATE-accredited Master's degree programs at UNK, a common NCATE assessment plan is being developed. This effort is being coordinated by the Associate Dean of the College of Education. There are six common assessments to be used by these programs:

- **Cumulative Program GPA**
- **Content Assessment – TBD by each program.** The Sci/Math Ed will likely use the Comprehensive Exam
- **Planning Assessment (Pedagogical Knowledge & Skills)**
- **Assessment and Analysis of Impact on P-12 Learning**
- **Professional Dispositions**
- **Conceptual Framework – Program Graduates' Survey**
- **Follow-up Studies – Survey of Employers**

3.3 Assessment Results

Annual assessment reports are shown in appendix A. Responses and considerations are discussed in Section 9 with the other future directions and goals of the program.

4. Institutional Contributions – overlap with Biology MS, Curriculum & Instruction MAEd Programs

The BIOL and TE departments have generously accommodated Sci/Math Ed student enrollment demand in courses designed for the following online graduate programs in their departments:

Online Biology M.S. Program. Sci/Math Ed students are eligible to take BIOL content courses with the online Biology M.S. students. Exceptions consist of research and seminar-related courses and, effective in the 2015-16 academic year, BIOL 820 (Intro to Graduate Studies). BIOL 881 (Current Issues in Biology) may only count in the Electives category of the Sci/Math Ed program. We are starting to see some reciprocation from CHEM online classes designed for Sci/Math Ed students. In individual cases, the Biology M.S. program has approved students to take CHEM 810 (Environmental Chemistry for H.S. Teachers) and CHEM 855 (Biochemistry for H.S. Teachers) as electives.

Curriculum & Instruction M.A.Ed. Program. The TE courses that Sci/Math Ed students take for the Professional Components and Electives degree categories were developed for this program.

5. Student Profile and Support Data

5.1 Admissions and Retention Data

				Emphasis Area					
Year	**Applied**	**Accepted**	**Accept Rate**	**BIOL**	**CHEM**	**MATH**	**PHYS**	**Active or Graduated**	**Retention Rate**
2012-13	23	18	78.3%	9	0	5	4	17	94.4%
2013-14	19	19	100%	6	4	6	3	18	94.7%
2014-15	*15*	*14*	*93.3%*	*4*	*6*	*2*	*2*	*14*	*100%*
TOTAL	**57**	**51**	**89.5%**	**19**	**10**	**13**	**9**	**49**	**96.1%**

NOTE: 2014-15 data are incomplete and only reflect the fall 2014 and spring 2015 semesters. The summer 2015 term figures will be added to this academic year.

It is UNK policy that a graduate student's status remains active until he or she has not taken any classes in two years. At this point, the retention data cannot support any conclusions, but these will continue to be tracked and reported on in the 2019-20 APR.

5.2 Degrees Conferred and Completion Time

		Emphasis Area				Time to Degree (yrs.)			
Year	**Degrees Conferred**	**BIOL**	**CHEM**	**MATH**	**PHYS**	**2 or less**	**2.1 – 3**	**3.1 – 5**	**Over 5**
2010-11	2	1	0	0	1	1	0	0	1
2011-12	4	1	0	1	2	2	0	2	0
2012-13	2	0	2	0	0	2	0	0	0
2013-14	13	4	3	3	3	7	3	2	1
TOTAL	**21**	**6**	**5**	**4**	**6**	**12**	**3**	**4**	**2**

5.3 Sci/Math Ed Program Admission Requirements

Applications are first evaluated by the UNK Graduate Admissions Director. If the applicant meets institutional requirements (primarily that he or she has an undergraduate degree from an accredited institution and has a GPA of least 2.75 on a 4.00-point scale), the applicant is approved for non-degree status and the application is forwarded to the Sci/Math Ed GPC for program admission consideration. To enter the Sci/Math Ed program, applicants must have a Bachelor's Degree with a teaching endorsement in Biology, Math, Chemistry, Natural Science (or "Science"), Physics or Physical Science and a standard teaching certificate or license. Applicants with middle-grades teaching endorsements (in Nebraska these cover grades 4-9) may be admitted into the program depending on their level of undergraduate science/math preparation. There is no specified minimum GPA requirement but in practice, it is expected that an applicant's GPA in undergraduate math and science courses meets or exceeds 2.75. The GRE is not required, but applicants are required to submit a letter of intent that summarizes their teaching experience, undergraduate preparation, and applicants from outside Nebraska must describe their teaching certification/licensing requirements.

The above requirements have served well to direct the desired student audience, in-service high school and some middle school math and science teachers, to the program. Occasionally, conditions are made for admission of students who have had non-traditional routes to their current teaching positions. For example, some states will license teachers based on them having a math or science content master's degree or passing the appropriate Praxis II subject exam. In these cases, the GPC may require these students to take TE courses, usually TE 809P (Curriculum Implementation) and TE 815P (The Effective Teacher: Enhancing Classroom Instruction), that will bring them up to speed on education principles.

5.4 Advising and Retention Efforts

Upon admission to the Sci/Math Ed program, a student is assigned one or two academic advisors, one for administrative purposes (the PD) and, if needed, the GPC representative from the student's emphasis area. The PD serves both roles for CHEM emphasis students. For retention purposes, we rely on advisors providing timely responses to student questions. At least twice each semester, at the beginning and shortly before registration for the upcoming semester, the PD sends extensive informational announcements *via* e-mail to all students in the program regarding enrollment, registration, degree program milestones (including graduation), and information on upcoming courses and suggested priorities.

5.5 Recruitment Efforts

The University of Nebraska System Online Worldwide Office and UNK eCampus office extensively advertises UNK online programs in general through mailings and advertisements in trade publications, social media, and internet search engines. For marketing specific to the Sci/Math Ed program, the PD works directly with the eCampus Marketing & Communications Specialist to formulate marketing plans as well as design and distribute informational postcards and advertising for print and electronic publications. Costs are split between the Sci/Math Ed program and the eCampus office. Listed below are the Sci/Math Ed marketing actions since the spring of 2012:

- Postcard campaigns directed to:
  - All Nebraska high school math and science teachers (summer 2012 and spring 2013, 2014, and 2015)
  - 1,100 high school math and science teachers in selected regions of CA,CO, FL, KS, MT, and TX (spring 2014, 2015) from FIRSTMARK mailing list
  - National Science Teachers Association (NSTA) "active buyers" (spring 2014, 2015)
- Facebook ad (spring/summer 2014 and spring 2015)
- Google AdWords (spring 2014, 2015)
- Production of marketing video for posting on YouTube and UNK webpages (spring 2015)
- Production of 2-page program description flyer for distribution via mailings, e-mail campaigns, and conference exhibitions (spring 2015)
- E-mail campaigns directed to:
  - NSTA conference attendees (spring 2014)
  - Persons in UNK Talisma database (spring 2015)
- Print advertising:
  - NSTA *The Science Teacher* (spring 2015)
  - National Council of Teachers of Mathematics (MCTM) national conference program (spring 2015)
- Exhibit at the Nebraska Association of Teachers of Mathematics statewide conference (planned fall 2015)

The PD keeps a spreadsheet of all prospective student leads (218 between April 2012 and January 2015) and records the following information: prospective student name and e-mail address, state of residence, planned emphasis area, method of initial contact (Online Worldwide, UNK eCampus, or direct e-mail or phone call to the PD), special information, application term and acceptance (or rejection). Each semester, 2-4 weeks before an application deadline, the PD e-mails the leads from the last 18 months to thank them for their interest in the Sci/Math Ed program and remind them of the application deadline.

6. Faculty Matters

Members of the University of Nebraska Graduate Faculty and other UNK faculty members who have been authorized by the Dean of Graduate Students are eligible to teach UNK graduate courses. To become eligible to teach online courses, faculty members must complete a semester-long Faculty Online Training course taught by eCampus instructional designers. To develop a new online course, the faculty instructor must submit an application to the eCampus office that is approved by that faculty member's department Chair and college Dean. Once the course is developed and the format and course features are approved by the eCampus instructional designer, the faculty member is awarded a $1,500 stipend (or $2,500 if it is his or her first new online course). At times, the Sci/Math Ed program has supplemented this stipend in order to incentivize the development of new courses in certain areas.

Demographic data for currently-employed UNK faculty who have taught Sci/Math Ed students are shown in the table below:

		Rank					Status		Gender		Ethnicity			
Dept	**Faculty**	**Prof**	**Assoc Prof**	**Asst Prof**	**Sr Lect**	**Lect**	**Full time**	**Part time**	**Male**	**Female**	**White**	**Afr Amer**	**Hisp**	**Asian**
BIOL	10	3	1	3	1	2	8	2	5	5	10	0	0	0
CHEM	5	2	2	0	1	0	5	0	3	2	4	0	0	1
MATH	4	0	0	4	0	0	4	0	2	2	4	0	0	0
PHYS	2	1	1	0	0	0	2	0	2	0	1	0	1	0
TE	18	2	5	3	0	8	14	4	8	10	16	0	1	1
Total	**39**	**8**	**9**	**10**	**2**	**10**	**33**	**6**	**20**	**19**	**35**	**0**	**2**	**2**

6.1 Faculty *vitae*

Faculty information, including name, race, gender, rank, part-time/full-time status, education, professional background, and courses taught is given in Appendix B.

7. Resource Bases

In December 2010, the UNK Science Education M.S.Ed. Program was award a $34,405 Distance Education Program Development grant from the University of Nebraska Online Worldwide office to re-name the program Science/Math Education and retool it as a completely online program. For two-and-a-half years, this grant was the sole funding source for the program. In July 2013, a differential tuition account was established for the Sci/Math Ed program.

Online class tuition rates are higher than those charged for face-to-face classes, and differential tuition is defined as the difference between the online class tuition and the in-state face-to-face class tuition. Each year the UNK campus administration establishes a "standard" graduate online class tuition rate, but individual colleges and departments may request to alter that rate for their courses. For the 2014-2015 academic year, the standard graduate online tuition rates are $269 (Nebraska residents) and $430 (out-of-state residents) per credit hour. These are adopted by the CHEM, MATH, and PHYS departments. The BIOL department has higher rates, $275 in-state and $480 out-of-state, while the College of Education (includes the TE department) uses the standard in-state rate but has a lower out-of-state rate of $393 per credit hour. Differential tuition is calculated on a per credit hour basis as follows:

Department	**In-state online rate**	**In-state face-to-face rate**	**In-state Differential tuition per credit hour**	**Out-of-state online rate**	**In-state face-to-face rate**	**Out-of-state Differential tuition per credit hour**
BIOL	$275.00	$216.50	**$58.50**	$480.00	$216.50	**$263.50**
CHEM, MATH, PHYS	$269.00	$216.50	**$52.50**	$430.00	$216.50	**$213.50**
TE	$269.00	$216.50	**$52.50**	$393.00	$216.50	**$176.50**

The generated differential tuition is split among the Online Worldwide office, eCampus, departments, and programs as determined by the University of Nebraska system President and UNK Dean of Graduate Studies. The Sci/Math Ed program receives approximately 65% of the differential tuition generated by students admitted in the program.

UNK faculty are on 9-month contracts and receive additional pay for teaching summer courses at the rate 3% of base salary per credit hour taught.

7.1 Online Worldwide Grant Expenditures

Grant Award	**$34,405.00**
RECURRING STIPENDS	
Program Director stipend (May 2012 – June 2013)	$6,284.88
benefits	$1,975.01
SUMMER COURSE INSTRUCTION	
Trecia Markes (Summer 2013 PHYS 813, Intro to Analog & Digital Electronics)	$3,399.99
Benefits	$ 260.09
Frank Kovacs (1/2 of Summer 2013 CHEM 855, Biochem for HS Teachers)	$2,613.00
Benefits	$ 838.59
Pari Ford (Summer 2014 MATH 871-03, ST: Math Knowledge for Teachers)	$4,363.00
Benefits	$1,460.54
Nickolas Hein (Summer 2014 MATH 871-01, ST: Modern Algebra with Geometry)	$5,058.00
Benefits	$1,631.44
SUPPLEMENTAL COURSE DEVELOPMENT STIPENDS	
Annette Moser (CHEM 864, Analytical Chem for HS Teachers, paid in Feb. 2012)	$2,500.00
Benefits	$ 702.15
OPERATIONAL EXPENSES	
Business cards (June 2012)	$47.08
MARKETING	
NSTA active buyers mailing list (March 2013)	$1,784.00
NSTA e-mail blast to San Antonio conference attendees (May 2013)	$1,132.10
NSTA e-mail blast to St. Louis conference attendees (June 2013)	$416.00
TOTAL EXPENSES	**$34,465.87**
Remaining funds	($60.87)

7.2 Differential Tuition Account Income and Expenditures

2013-2014 Academic Year + Summer	
INCOME -- Differential tuition remission from 2011-12	**$12,350.00**
INCOME -- Differential tuition remission from 2012-13	**$25,000.00**
RECURRING STIPENDS	
Program Director stipend (July 2013-August 2014)	$6,403.80
benefits	$1,878.54
SUMMER COURSE INSTRUCTION	
Frank Kovacs (Summer 2014 CHEM 855, Biochem for HS Teachers)	$5,316.00
Benefits	$1,756.41
Jacob Weiss (Summer 2014 MATH 871-02, ST: Topics in Difference Equations)	$4,221.00
Benefits	$1,347.52
OPERATIONAL EXPENSES	
Conference room webcam equipment for oral comp exams	$ 199.21
TOTAL EXPENSES	**$21,122.48**
Remaining funds	$16,227.52

2014-2015 Academic Year + Summer PROJECTION	
2013-2014 funds carried forward	**$16,227.52**
INCOME -- Differential tuition remission from 2011-12	**$33,000.00**
RECURRING STIPENDS	
Program Director stipend (September 2014-August 2015) (est.)	*$5,595.00*
Benefits (est.)	*$1,791.00*
Total Recurring Stipends + Benefits	*$7,386.00*
SUMMER 2015 COURSE INSTRUCTION (est.)	
Haishi Cao (CHEM 899P-01, ST: Organic Chem for HS Teachers)	*$5,243.00*
Benefits	*$1,835.00*
Carla Kegley-Owen (CHEM 899P-02, ST: Chemical Kinetics for HS Teachers)	*$2,916.00*
Benefits	*$1,021.00*
Nickolas Hein (MATH 871-01, ST: Algebraic Geometry)	*$5,140.00*
Benefits	*$1,700.00*
Lee Powell (PHYS 809, Meteorology)	*$4,699.00*
Benefits	*$1,645.00*
Total Summer Course Instruction	*$24,199.00*
SUPPLEMENTAL COURSE DEVELOPMENT STIPENDS	
Nickolas Hein (Summer 2014 MATH 871-01, ST: Modern Algebra with Geometry)	$1,000.00
Benefits (est.)	*$ 350.00*
Jacob Weiss (Summer 2014 MATH 871-02, ST: Topics in Difference Equations)	$1,000.00
Benefits (est.)	*$ 350.00*

Amy Nebesniak (Summer 2015 MATH 871-02, ST: Current Research in Math Educ)	$1,000.00
Benefits (est.)	*$ 350.00*
Nickolas Hein (Summer 2015 MATH 871-01, ST: Algebraic Geometry)	$1,000.00
Benefits (est.)	*$ 350.00*
Total Supplemental Course Development Stipends + Benefits	*$5,400.00*
OPERATIONAL EXPENSES (est.)	
APR self-study production and other expenses	*$ 200.00*
MARKETING (est.)*	
NSTA active buyers mailing list	*$ 287.50*
Postcard mailing to CA, CO, FL, KS, MT, TX (FIRSTMARK mailing list)	*$ 669.25*
Postcard mailing to Nebraska math & science teachers	*$ 300.00*
Google AdWords	*$ 280.00*
Facebook Ad	*$ 150.00*
UNK Video production	*$ 150.00*
NSTA The Science Teacher print ad	*$ 527.50*
NCTM Boston Conference program print ad	*$ 689.50*
UNK Publications & Printing design work	*$ 100.00*
Total Marketing	*$3,153.75*
TOTAL EXPENSES	***$40,338.75***
Remaining funds	*$8,888.77*

*Sci/Math Ed marketing expense portion shown – eCampus is providing a 1:1 match.

Comment on remaining funds. Each year, the PD solicits the GPC members for distance education-related needs that could be funded in part or fully by remaining funds in the Sci/Math Ed program budget.

Carryover funds. The large carryover of $16,227.52 from 2013-14 to 2014-15 was made with the intent to have most of it serve as a "nest egg" for the establishment of dedicated Sci/Math Ed program staff support – possibly a graduate assistant, office associate, or program coordinator. This has not materialized in light of the need to continue to develop courses and expand offerings in the CHEM, MATH, and PHYS, departments.

Resource distribution among the five participating departments. While the admissions, student advising, and marketing functions of the Sci/Math Ed program benefit all participating departments, it is clear that the vast majority of resources have been directed toward the CHEM, MATH, and PHYS departments for course development and summer offerings. This is not intended to be a permanent situation. Without the existing staffing levels and course offerings from the BIOL and TE departmental online graduate programs, it would have been impossible for the Sci/Math Ed program to grow at its present rate. In accepting the Online Worldwide grant, a proposal that the Chairs of all five participating departments signed, the UNK administration committed to developing the Sci/Math Ed program as a hybrid content/pedagogy program with sustainable major emphases in all four content areas. With BIOL and TE already at the point of sustainability, the top budget priority has been to incentivize the CHEM, MATH, and PHYS departments to reach this level. When this is accomplished – see the curricular issues discussed in Section 9 – the PD and GPC will develop a more equitable resource distribution plan.

8. Program Comparison

Unlike a traditional departmental program, where documented research publications and grants lend much to that program's reputation and prestige, comparing online teaching programs relies solely on information gleaned from individual institutions' websites. This is an arduous task and with the online education landscape changing on a seemingly daily basis, comparisons in quality and structure become outdated quickly. That said, over the last two years, the PD has accessed descriptions of online Science and Math Education Master's programs from dozens of school, and the following observations can be noted:

- Among online science and math education Master's programs across the country, there is a fluid continuum in the ratio of science/math to curriculum/pedagogy coursework, with the vast majority of programs leaning strongly toward one side or the other. That ratio in the UNK Sci/Math Ed program (21:15 credit hours) appears to be in the intermediate region.
- Very few science education Master's programs required or provide students opportunity to take significant coursework outside of teacher education and one specific science emphasis area. Exceptions include Colorado State's Master of Natural Science Teaching, Northeastern State's (OK) Science Education, and Chadron State's Science/Math Education programs. The PD has yet to come across a program in which the curriculum includes both math and science classes.
- Math education Master's programs are common but it is rare for any to be completely online. Regionally, the University of Nebraska-Lincoln's M.A.T. program is establishing a presence; however, the vast majority of programs are face-to-face or blended.
- The closest comparable programs at online-only institutions (Univ. of Phoenix, Capella Univ., Walden Univ., Western Governors Univ., etc.) and similarly designed large-scale online operations at academic institutions such as Arizona State and USC are heavily weighted on the curriculum/pedagogy end of the spectrum. It is safe to say that these institutions and others that emphasize massive open online courses (MOOCs) are not direct competitors of the Sci/Math Ed program.

9. Future Direction

The development of the Sci/Math Ed program is still in the formative stages. The recent program growth as well as the level of support from the administration and participating departments are all encouraging and indicate a commitment to moving the program forward. However, a number of issues regarding assessment, curriculum, and program resources must be addressed over the next few years. **Comments and suggestions by the Review Team on anything in this section is greatly appreciated.**

9.1 Assessment

As discussed in Section 3, the four assessment measuring tools – comprehensive exam, capstone project, exit survey, and employer survey – are in various stages of development and implementation. Short-term efforts will focus on the completion of the capstone project development as a 3-credit course, establishing target rubrics/scores for the exit and employer surveys as well as the implementation of the employer surveys.

9.2 Curriculum

There are three issues of immediate concern regarding the Sci/Math Ed curriculum.

9.2.1 Required Curriculum Course

Currently, BIOL 876 (Natural Science Curriculum) is required of all Sci/Math Ed students. For the last two years, this course could not be offered. The one faculty member qualified to teach it went on sabbatical in 2013-14 then resigned her UNK faculty position in the summer of 2014. This forced the cancellation of the spring 2015 offering. The Biology department will not be replacing this faculty member with one who has the necessary education background to teach a curriculum/pedagogy course. Therefore, this or a similar curriculum course must now be offered by a different department. Ideas under consideration and discussion are:

- **Revival of PHYS 872P (Science Curricula) as an online course.** There is a qualified PHYS faculty member willing to teach this, but the PHYS department is very stressed for available faculty workload due to the recent replacement of several retired 12-hour teaching load faculty with new assistant professors with 9-hour teaching loads.
- **Fulfillment of this requirement with a TE course.** Currently, students are allowed to substitute TE 809P (Curriculum Implementation) or TE 810 (Design & Development of Instruction) for BIOL 876. This could be allowed to continue, but it would not be as preferable as a course coming from a science or math department.
- **Hiring of adjunct faculty.** For a course that is required of all Sci/Math Ed students, it would be preferred that it be taught by a UNK faculty member in residence. However, the hiring of an adjunct faculty member is something to be considered.

Additionally, the math education faculty have expressed an interest in offering an online math curriculum class for the MATH emphasis students. This is an excellent idea that will be explored further now that the Math department has developed several content courses.

9.2.2 Capstone Course and Comprehensive Exam

It is planned to structure the capstone project as a 3-credit course (SMED 888 – Science/Math Education Capstone) to be added as a requirement in the program. To maintain the program at 36 credit hours, it will be necessary to remove three hours from one of the degree program categories. At the time of this writing, this is under discussion by the GPC.

Additionally, integrating or merging the capstone project with the comprehensive exam is under discussion. As the program grows, the logistical and time commitments associated with the current written + oral comprehensive exam format is becoming more burdensome for the GPC. Such integration or merging may streamline the comprehensive exam process while still addressing all of the learning goals and objectives for assessment purposes.

9.2.3 Course Scheduling Patterns

With their departmental online programs, there are numerous BIOL and TE courses available every semester and summer to Sci/Math Ed students. However, the CHEM, MATH, and PHYS departments have had to create new courses to participate in the Sci/Math Ed programs. Freeing academic year

faculty workload availability has been difficult, so most of their courses are offered during the summer, which is an off-contract period for faculty. In order to reach the goal level of growth and sustainability described in Section 9.3, it will be necessary for all of the participating departments to offer at least one online course each semester. To reiterate the progress made by these three departments to this point:

- CHEM – 1 class every other fall, 1 class every spring, 2 classes every summer
- MATH – no classes during fall and spring, 2 classes every summer
- PHYS – 1 class every other fall, no classes in spring, 1 class every summer

The curriculum course situation has also created some crimping in course scheduling. BIOL 876 was offered every spring while TE 809P is offered only in the summer and TE 810 is offered every other fall semester.

Currently, it is not within the financial capability of the Sci/Math Ed program to assist with creating additional faculty workload availability during the academic year, other than possibly the occasional adjunct hiring. The PD will continue to work with department Chairs, Dean of Natural & Social Sciences, and Dean of Graduate Studies to create opportunities for additional online course offerings.

9.3 Program Resources and Staffing

While most UNK online graduate programs have staff support – in the form of a graduate assistant or program coordinator -- in addition to a program director, the Sci/Math Ed program has not yet hired any staff support. Instead, resources have directed toward expanding online course offerings and marketing initiatives. As the program grows, it will become necessary to hire staff support as well as assist departments in maintaining necessary course offerings for Sci/Math Ed students to progress through their degree programs. The following hypothetical annual budget reflects this goal level of sustainability:

Goal Annual Budget	
RECURRING SALARIES/STIPENDS	
Program Director stipend (based on 7.5% of $75,000 annual base)	$ 5,625.00
Benefits (35% of stipend)	$ 1,968.75
0.5 FTE Program Coordinator position	$17,500.00
Benefits (35% of salary)	$ 6,125.00
Total Recurring Stipends + Benefits	**$31,218.75**
DEPARTMENT SUPPORT	
Biology	*$11,846.25
Chemistry	*$11,846.25
Mathematics & Statistics	*$11,846.25
Physics & Physical Science	*$11,846.25
Teacher Education	*$11,846.25
Total Department Support	**$59,231.25**

OPERATIONAL EXPENSES (est.)	
Program Coordinator office supplies, copying, etc.	$ 1,000.00
Coordinator phone line (12 @ $40/month)	$ 480.00
Total Operational Expenses	**$ 1,480.00**
MARKETING	**$ 5,000.00**
TOTAL GOAL BUDGET	**$96,930.00**

***NOTE on Department Support allocations:** To this point, all department support from the Sci/Math Ed program has been in the form of summer course instructor salaries and course development stipend supplements. The amounts given here are based on the equivalent of 4.5 credit hours of summer course instruction, assuming a faculty base salary of $65,000 + 35% benefits, for each of the five participating departments. Each department would have flexibility in how these funds are spent as long the expenses can be linked to Sci/Math Ed program instruction. It is anticipated that spending patterns would likely fall along the following lines:*

- *Two 3-credit summer online courses with Sci/Math Ed providing half of the second course funding that is matched from the department, college, or eCampus*
- *One 3-credit summer online course with the remaining funds used for course development and online instruction-related equipment and facility needs.*
- *All funds used for course development and online instruction-related equipment and facility needs.*

The total annual funds required is almost triple the 2013-14 differential tuition income ($33,000). Therefore, it will be necessary to increase the program size from 55 (current level) to approximately 165 students. With sustained marketing efforts and the addition of a few academic-year online course offerings (see Section 9.2.3), this should be achievable in the next 5 years given the current program growth rate.

Appendix A:

Assessment Reports and Documentation

University of Nebraska Kearney

Detailed Assessment Report
2011-2012 MSEd in Science/Math Education.

As of: 1/24/2013 02:22 PM EST

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request*.)

Mission / Purpose

The mission of the Science/Math Education program is to improve classroom instruction by providing a flexible yet rigorous program of study within an area of endorsement (Biology, Chemistry, Mathematics, Physics, or Physical Science). Candidates who successfully complete the degree demonstrate in-depth pedagogical and content knowledge within their area of specialization, possess broad knowledge of content in multiple disciplines, and apply their knowledge to the curriculum in order to improve teaching and student learning.

Goals

G 1: GOAL 1: Content Knowledge

Candidates demonstrate in-depth knowledge of their area of emphasis. (NCATE 1a, NSTA 1, 2, 3, 4)

Connected Document

Rubric for MSST Capstone Project

G 2: Goal 2: Supporting Areas

Candidates relate content from supporting science/math disciplines to their area of specialization. (NCATE 1a, 1b; NSTA 1, 7)

Connected Document

Rubric for MSST Capstone Project

G 3: Goal 3: Pedagogy

Candidates demonstrate in-depth knowledge of pedagogical methods to help all students learn. (NCATE 1b, 1d, 3c, 4a, 4d; NSTA 1, 5)

Connected Document

Rubric for MSST Capstone Project

G 4: Goal 4: PCK

Candidates apply their pedagogical content knowledge to the development of curriculum that facilitates student learning. (NCATE 1b, 1c, 1d, 3c; NSTA 6)

Connected Document

Rubric for MSST Capstone Project

G 5: Goal 5: Reflection

Candidates make data-driven decisions about their instructional practice. (NCATE 1c, 1d, 3c; NSTA 8, 10)

Connected Document

Rubric for MSST Capstone Project

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Outcome 1

Candidates can apply the major concepts, principles, theories, and laws of their field of specialization in completing the oral and written comprehensive exam.

Related Measures

M 2: Comprehensive exam

The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document

Science/Math Education Comprehensive Exam Rubric

Target:

All candidates meet or exceed expectations for all aspects of the comprehensive exam.

Finding (2011-2012) - Target: Met

The comprehensive exam rubric was implemented in the Fall 2011 semester. Four students took the

comprehensive exam. Three passed with "meets expectations" in all areas and one passed with "exceeds expectations" in all areas.

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Target:
TBD

Finding (2011-2012) - Target: Not Reported This Cycle
The employer survey is in development.

SLO 2: Outcome 2
Candidates can synthesize the interrelationships between concepts and processes in their field of specialization and those of other science/math fields in completing the written and oral comprehensive exam.

Related Measures

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

Target:
TBD

Finding (2011-2012) - Target: Not Reported This Cycle
The exit survey is in development

SLO 3: Outcome 3
Candidates apply appropriate mathematics and statistics concepts to science topics.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

SLO 4: Outcome 4
Candidates can evaluate current theories related to pedagogy and learning.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

SLO 5: Outcome 5
Candidates can apply a variety of research-based instructional strategies to promote student learning

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Analysis Questions and Analysis Answers

Please indicate the number of graduates during the academic year, the number of majors, and/or number of minors.

32 majors 4 graduates -- 3 with emphases in physics/physical science, 1 with emphasis in biology

Briefly discuss strengths of your department/program based on your assessment data.
Our program resulted in the advancing the science content knowledge of four practicing teachers based on the results of their comprehensive exams: Three of the graduates achieved "meets expectations" in all areas of comp exam and one graduate achieved "exceeds expectations" in all areas of comp exam

Briefly discuss any areas that may need attention.
None; all targets were met.

Provide a description of when/how assessment results were shared with department/program faculty. Were the assessment results discussed at a faculty meeting or retreat? Is the entire dept./program involved in decision making related to actions to be taken based on the data?
Assessment results were shared with the program committee following each comprehensive exam. The committee is currently using the assessment results in developing the following new specific actions: exit survey, employer survey, and a capstone project.

Critically evaluate the assessment process. Did the process assess department/program learning outcomes well? Was the data gathered useful?
The data are useful in order to gauge students' overall comprehension of the program's academic content. However, further actions are needed to evaluate the students' application of their new knowledge in their teaching positions. The new specific actions being developed -- exit survey, employer survey, and capstone project -- are expected to lend insight into this. We anticipate implementation in January 2014.

Based on your assessment results, what changes has your department/program made over the last 4 years to improve student learning? Give 2-3 specific examples of the changes made.

Previously, graduating students would take their comprehensive exam in written or oral format. It was determined by the program committee that in order to properly implement the comprehensive exam rubric, written and oral responses would give a clearer understanding of students' content and pedagogical knowledge that they gained in the program. 2011-12 was the first year students were required to take written and oral components of the comprehensive exam. Copies of the written component for each student have been uploaded. In each case, oral exam questions varied -- but always starting with follow-up questions to the written exam responses -- but each question pertained to at least one target outcome on the exam rubric. The program is continuing to develop an exit survey, employer survey, and capstone project.

Detailed Assessment Report
2012-2013 MSEd in Science/Math Education.
As of: 1/18/2015 10:30 AM EST

Mission / Purpose

The mission of the Science/Math Education program is to improve classroom instruction by providing a flexible yet rigorous program of study within an area of endorsement (Biology, Chemistry, Mathematics, Physics, or Physical Science). Candidates who successfully complete the degree demonstrate in-depth pedagogical and content knowledge within their area of specialization, possess broad knowledge of content in multiple disciplines, and apply their knowledge to the curriculum in order to improve teaching and student learning.

Goals

G 1: GOAL 1: Content Knowledge
Candidates demonstrate in-depth knowledge of their area of emphasis. (NCATE 1a, NSTA 1, 2, 3, 4)

Connected Document
Rubric for MSST Capstone Project

G 2: Goal 2: Supporting Areas
Candidates relate content from supporting science/math disciplines to their area of specialization. (NCATE 1a, 1b; NSTA 1, 7)

Connected Document
Rubric for MSST Capstone Project

G 3: Goal 3: Pedagogy
Candidates demonstrate in-depth knowledge of pedagogical methods to help all students learn. (NCATE 1b, 1d, 3c, 4a, 4d; NSTA 1, 5)

Connected Document
Rubric for MSST Capstone Project

G 4: Goal 4: PCK
Candidates apply their pedagogical content knowledge to the development of curriculum that facilitates student learning.
(NCATE 1b, 1c, 1d, 3c; NSTA 6)

Connected Document
Rubric for MSST Capstone Project

G 5: Goal 5: Reflection
Candidates make data-driven decisions about their instructional practice. (NCATE 1c, 1d, 3c; NSTA 8, 10)

Connected Document
Rubric for MSST Capstone Project

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Outcome 1
Candidates can apply the major concepts, principles, theories, and laws of their field of specialization in completing the oral and written comprehensive exam.

Related Measures

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

Target:
All candidates meet or exceed expectations for all aspects of the comprehensive exam.

Finding (2012-2013) - Target: Not Met
The comprehensive exam rubric was implemented in the Fall 2011 semester. Three students took the comprehensive exam in 2012-13. One passed with "meets expectations" in all areas, one passed with "exceeds expectations" in all areas, and one failed with "does not meet expectations" some of the areas.

Finding (2011-2012) - Target: Met
The comprehensive exam rubric was implemented in the Fall 2011 semester. Four students took the comprehensive exam. Three passed with "meets expectations" in all areas and one passed with "exceeds expectations" in all areas.

Connected Document
Science/Math Education Comprehensive Exam Rubric

Finding (2010-2011) - Target: Met

For 2010-11, the rubric had not yet been developed.
Two students took comprehensive exams in the 2010-11 cycle. One student passed without reservation. The other student passed with reservations regarding content details in biology and chemistry.

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Target:
TBD

Finding (2012-2013) - Target: Not Reported This Cycle
A common employer survey instrument for all UNK online graduate programs with a teacher education component is being developed.

Finding (2011-2012) - Target: Not Reported This Cycle
The employer survey is in development.

Finding (2010-2011) - Target: Not Reported This Cycle
The employer survey has not yet been developed.

SLO 2: Outcome 2
Candidates can synthesize the interrelationships between concepts and processes in their field of specialization and those of other science/math fields in completing the written and oral comprehensive exam.

Related Measures

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
This measures student values regarding their perceptions of the Sci/Math Ed program quality and its impact on furthering students' understanding of math/science content, pedagogical techniques, and professional practices and values. This survey was developed as a common instrument to be used by all UNK online graduate programs that include a teacher education component and was first implemented in the Fall 2012 semester.

Source of Evidence: Exit interviews with grads/program completers

Target:
TBD

Finding (2012-2013) - Target: Met
The exit survey was taken by 2 graduation candidates. Based on the average question score of 4.15 (agree) out 5.00 (Scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree where all questions were phrased so that agreeing corresponded to positive perceptions), there is a positive perception on the part of the students regarding the knowledge and professional skills gained from the program.

Finding (2011-2012) - Target: Not Reported This Cycle
The exit survey is in development

Finding (2010-2011) - Target: Not Reported This Cycle
The exit survey has not yet been developed.

SLO 3: Outcome 3
Candidates apply appropriate mathematics and statistics concepts to science topics.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

Target:
All candidates meet or exceed expectations in all aspects of the capstone project.

Finding (2012-2013) - Target: Not Reported This Cycle
The capstone project is in development.

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
This measures student values regarding their perceptions of the Sci/Math Ed program quality and its impact on furthering students' understanding of math/science content, pedagogical techniques, and professional practices and values. This survey was developed as a common instrument to be used by all UNK online graduate programs that include a teacher education component and was first implemented in the Fall 2012 semester.

Source of Evidence: Exit interviews with grads/program completers

SLO 4: Outcome 4
Candidates can evaluate current theories related to pedagogy and learning.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
This measures student values regarding their perceptions of the Sci/Math Ed program quality and its impact on furthering students' understanding of math/science content, pedagogical techniques, and professional practices and values. This survey was developed as a common instrument to be used by all UNK online graduate programs that include a teacher education component and was first implemented in the Fall 2012 semester.

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

SLO 5: Outcome 5
Candidates can apply a variety of research-based instructional strategies to promote student learning

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 3: Exit Survey
This measures student values regarding their perceptions of the Sci/Math Ed program quality and its impact on furthering students' understanding of math/science content, pedagogical techniques, and professional practices and values. This survey was developed as a common instrument to be used by all UNK online graduate programs that include a teacher education component and was first implemented in the Fall 2012 semester.

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Response to failed comprehensive exam
The student who failed the comprehensive exam was assigned to develop an educational research proposal that, in theory, could be implemented in one or more of the high school classes that the student teaches. The Graduate Program Committee determined that this was the best format to address deficiencies in research techniques and applications of pedagogical methods and science content. An evaluation rubric was developed by the GPC. Upon successful completion of this proposal, the student's comprehensive exam result would be changed from "fail" to "pass". The GPC will discuss if this type of project is suitable for the capstone project in development and whether aspects of the capstone project and comprehensive exam should be integrated or merged.

Established in Cycle: 2012-2013
Implementation Status: Planned
Priority: High

Analysis Questions and Analysis Answers

Please indicate the number of graduates during the academic year, the number of majors, and/or number of minors.

44 majors, 2 graduates -- both with emphases in chemistry

Briefly discuss strengths of your department/program based on your assessment data.

Our program resulted in the advancing the science content knowledge of two practicing teachers based on the results of their comprehensive exams: one of the graduates achieved "meets expectations" in all areas of comp exam, and one graduate achieved "exceeds expectations" in all areas of comp exam.

Results from the exit survey indicate that there is general satisfaction with the knowledge and skills gained in the program.

Briefly discuss any areas that may need attention.

One student failed the comprehensive exam. An additional educational research proposal was assigned as a condition of the student's graduation. It is hoped this will alleviate deficiencies observed during the comprehensive exam. The effectiveness of this assignment will factor into the capstone project development and possible integration with the comprehensive exam.

Provide a description of when/how assessment results were shared with department/program faculty. Were the assessment results discussed at a faculty meeting or retreat? Is the entire dept./program involved in decision making related to actions to be taken based on the data?

Assessment results were shared with the program committee following each comprehensive exam. The committee is currently using the assessment results in developing the following new specific actions: employer survey, capstone project.

Critically evaluate the assessment process. Did the process assess department/program learning outcomes well? Was the data gathered useful?

The data are useful in order to gauge students' overall comprehension of the program's academic content, and the exit survey is valuable for determining the students' perceptions of the knowledge and skills gained in the program. However, further actions are needed to evaluate the students' application of their new knowledge in their teaching positions. The new specific actions being developed -- employer survey, capstone project -- are expected to lend insight into this. We anticipate implementation of the employer survey in the 2015-16 academic year and the capstone project in the 2016-17 academic year.

Based on your assessment results, what changes has your department/program made over the last 4 years to improve student learning? Give 2-3 specific examples of the changes made, and any results you have of further evaluation indicating how well these changes accomplished their goals.

Prior to the fall of 2011, graduating students would take their comprehensive exam in written or oral format. It was determined by the program committee that in order to properly implement the comprehensive exam rubric, written and oral responses would give a clearer understanding of students' content and pedagogical knowledge that they gained in the program. 2011-12 was the first year students were required to take written and oral components of the comprehensive exam. Copies of the written component for each student have been uploaded. In each case, oral exam questions varied -- but always starting with follow-up questions to the written exam responses -- but each question pertained to at least one target outcome on the exam rubric.

The exit survey was first implemented this year. Initial results are encouraging but several more years of data will be required to generate a statistically significant sample set.

The program is continuing to develop an employer survey and capstone project.

University of Nebraska Kearney

Detailed Assessment Report
2013-2014 MSEd in Science/Math Education.
As of: 1/18/2015 10:58 AM EST

Mission / Purpose

The mission of the Science/Math Education program is to improve classroom instruction by providing a flexible yet rigorous program of study within an area of endorsement (Biology, Chemistry, Mathematics, Physics, or Physical Science). Candidates who successfully complete the degree demonstrate in-depth pedagogical and content knowledge within their area of specialization, possess broad knowledge of content in multiple disciplines, and apply their knowledge to the curriculum in order to improve teaching and student learning.

Goals

G 1: GOAL 1: Content Knowledge
Candidates demonstrate in-depth knowledge of their area of emphasis. (NCATE 1a, NSTA 1, 2, 3, 4)

Connected Document
Rubric for MSST Capstone Project

G 2: Goal 2: Supporting Areas
Candidates relate content from supporting science/math disciplines to their area of specialization. (NCATE 1a, 1b; NSTA 1, 7)

Connected Document
Rubric for MSST Capstone Project

G 3: Goal 3: Pedagogy
Candidates demonstrate in-depth knowledge of pedagogical methods to help all students learn. (NCATE 1b, 1d, 3c, 4a, 4d; NSTA 1, 5)

Connected Document
Rubric for MSST Capstone Project

G 4: Goal 4: PCK
Candidates apply their pedagogical content knowledge to the development of curriculum that facilitates student learning.
(NCATE 1b, 1c, 1d, 3c; NSTA 6)

Connected Document
Rubric for MSST Capstone Project

G 5: Goal 5: Reflection
Candidates make data-driven decisions about their instructional practice. (NCATE 1c, 1d, 3c; NSTA 8, 10)

Connected Document
Rubric for MSST Capstone Project

Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

SLO 1: Outcome 1
Candidates can apply the major concepts, principles, theories, and laws of their field of specialization in completing the oral and written comprehensive exam.

Related Measures

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

Target:
All candidates meet or exceed expectations for all aspects of the comprehensive exam.

Finding (2013-2014) - Target: Met
The comprehensive exam rubric was implemented in the Fall 2011 semester. Twelve students took the comprehensive exam in 2014-15. All passed with "meets expectations" in all areas. The student who failed the exam in 2012-13 successfully completed the assigned educational research project. This student's comprehensive exam score was changed from "fail" to "pass" and the student was allowed to graduate.

Finding (2012-2013) - Target: Not Met
The comprehensive exam rubric was implemented in the Fall 2011 semester. Three students took the comprehensive exam in 2012-13. One passed with "meets expectations" in all areas, one passed with "exceeds expectations" in all areas, and one failed with "does not meet expectations" some of the areas.

Finding (2011-2012) - Target: Met
The comprehensive exam rubric was implemented in the Fall 2011 semester. Four students took the comprehensive exam. Three passed with "meets expectations" in all areas and one passed with "exceeds

expectations" in all areas.

Connected Document
Science/Math Education Comprehensive Exam Rubric

Finding (2010-2011) - Target: Met
For 2010-11, the rubric had not yet been developed.
Two students took comprehensive exams in the 2010-11 cycle. One student passed without reservation. The other student passed with reservations regarding content details in biology and chemistry.

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Target:
TBD

Finding (2013-2014) - Target: Not Reported This Cycle
A common employer survey instrument for all UNK online graduate programs with a teacher education component has just been developed, but the target and evaluation rubric to be applied by the Science/Math Education program is still under discussion. It is anticipated that the employer survey will be implemented during the 2015-16 academic year.

Finding (2012-2013) - Target: Not Reported This Cycle
A common employer survey instrument for all UNK online graduate programs with a teacher education component is being developed.

Finding (2011-2012) - Target: Not Reported This Cycle
The employer survey is in development.

Finding (2010-2011) - Target: Not Reported This Cycle
The employer survey has not yet been developed.

SLO 2: Outcome 2
Candidates can synthesize the interrelationships between concepts and processes in their field of specialization and those of other science/math fields in completing the written and oral comprehensive exam.

Related Measures

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

Target:
TBD

Finding (2013-2014) - Target: Met
The exit survey was taken by 9 graduation candidates. Based on the cumulative average question score of 4.37 (agree) out 5.00 (Scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree where all questions were phrased so that agreeing corresponded to positive perceptions), there is a positive perception on the part of the students regarding the knowledge and professional skills gained from the program. Individual question score averages ranged from 3.89 to 4.89.

Finding (2012-2013) - Target: Met
The exit survey was taken by 2 graduation candidates. Based on the average question score of 4.15 (agree) out 5.00 (Scale: 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree, 1 = strongly disagree where all questions were phrased so that agreeing corresponded to positive perceptions), there is a positive perception on the part of the students regarding the knowledge and professional skills gained from the program.

Finding (2011-2012) - Target: Not Reported This Cycle
The exit survey is in development

Finding (2010-2011) - Target: Not Reported This Cycle
The exit survey has not yet been developed.

SLO 3: Outcome 3
Candidates apply appropriate mathematics and statistics concepts to science topics.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

Target:
All candidates meet or exceed expectations in all aspects of the capstone project.

Finding (2013-2014) - Target: Not Reported This Cycle
The capstone project is in development.

Finding (2012-2013) - Target: Not Reported This Cycle
The capstone project is in development.

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

SLO 4: Outcome 4
Candidates can evaluate current theories related to pedagogy and learning.

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 2: Comprehensive exam
The Comprehensive Exam is administered by the Program Committee in the final semester. Exams are comprised of both written and oral questions.

Source of Evidence: Comprehensive/end-of-program subject matter exam

Connected Document
Science/Math Education Comprehensive Exam Rubric

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

SLO 5: Outcome 5
Candidates can apply a variety of research-based instructional strategies to promote student learning

Related Measures

M 1: Capstone Project
Candidates submit a Capstone Project in their final semester. The project is evaluated by the Program Committee using the appropriate rubric.

Source of Evidence: Capstone course assignments measuring mastery

Connected Document
Rubric for MSST Capstone Project

M 3: Exit Survey
Exit survey given to graduates

Source of Evidence: Exit interviews with grads/program completers

M 4: Employer survey
A survey of the candidate's employer is used to judge several aspects of the candidate's knowledge, teaching skill, and professional dispositions.

Source of Evidence: Employer survey, incl. perceptions of the program

Details of Action Plans for This Cycle (by Established cycle, then alpha)

Response to failed comprehensive exam
The student who failed the comprehensive exam was assigned to develop an educational research proposal that, in theory, could be implemented in one or more of the high school classes that the student teaches. The Graduate Program Committee determined that this was the best format to address deficiencies in research techniques and applications of pedagogical methods and science content. An evaluation rubric was developed by the GPC. Upon successful completion of this proposal, the student's comprehensive exam result would be changed from "fail" to "pass".

Established in Cycle: 2012-2013
Implementation Status: Planned
Priority: High
Implementation Description: In the summer of 2014, the student completed the proposal. The GPC evaluated it to be "proficient" in all areas according to the grading rubric and the student was allowed to graduate.
Projected Completion Date: 07/2014

Analysis Questions and Analysis Answers

Please indicate the number of graduates during the academic year, the number of majors, and/or number of minors.

44 majors, 13 graduates -- 4 with emphases in biology, 3 in chemistry, 3 in math, and 3 in physics/physical science

Briefly discuss strengths of your department/program based on your assessment data.

Our program resulted in the advancing the science content knowledge of 12 practicing teachers based on the results of their comprehensive exams: all achieved "meets expectations" in all areas of comp exam.

Results from the exit survey indicate that there is general satisfaction with the knowledge and skills gained in the program.

Provide a description of when/how assessment results were shared with department/program faculty. Were the assessment results discussed at a faculty meeting or retreat? Is the entire dept./program involved in decision making related to actions to be taken based on the data?

Assessment results were shared with the program committee following each comprehensive exam. The committee is currently using the assessment results in developing the new capstone project.

Critically evaluate the assessment process. Did the process assess department/program learning outcomes well? Was the data gathered useful?

The data are useful in order to gauge students' overall comprehension of the program's academic content, and the exit survey is valuable for determining the students' perceptions of the knowledge and skills gained in the program. However, further actions are needed to evaluate the students' application of their new knowledge in their teaching positions. The new specific actions being developed -- employer survey, capstone project -- are expected to lend insight into this. We anticipate implementation of the employer survey in the 2015-16 academic year and the capstone project in the 2016-17 academic year.

Based on your assessment results, what changes has your department/program made over the last 4 years to improve student learning? Give 2-3 specific examples of the changes made, and any results you have of further evaluation indicating how well these changes accomplished their goals.

Prior to the fall of 2011, graduating students would take their comprehensive exam in written or oral format. It was determined by the program committee that in order to properly implement the comprehensive exam rubric, written and oral responses would give a clearer understanding of students' content and pedagogical knowledge that they gained in the program. 2011-12 was the first year students were required to take written and oral components of the comprehensive exam. Copies of the written component for each student have been uploaded. In each case, oral exam questions varied -- but always starting with follow-up questions to the written exam responses -- but each question pertained to at least one target outcome on the exam rubric.

The exit survey was first implemented in 2012-13. Initial results are encouraging but several more years of data will be required to generate a statistically significant sample set.

The program is continuing to develop a capstone project.

MSEd IN SCIENCE/MATH EDUCATION

Rubric for Comprehensive Exam

Target	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
1.1 Candidate successfully articulates the major concepts, principles, theories, and laws of their field of specialization.	Candidate demonstrates in-depth knowledge of the subject through inquiry, critical analysis, and synthesis.	Candidate can explain important principles and concepts delineated in professional standards.	Candidate is unable to give examples of important principles and concepts delineated in professional standards.
2.1 Candidate successfully conveys interrelationships between concepts and processes in their field of specialization and those of other science/math fields.	Candidate can articulate the knowledge and practices of science, including the unifying concepts of science as described by NSTA.	Candidate can explain content in supporting fields and how that content relates to the field of specialization; identifies mathematics skills that are applicable to science topics.	Candidate fails to identify and explain connections between the field of specialization and supporting science/math fields.
2.2 Candidate applies appropriate mathematics and statistics concepts to science topics.	Candidate is able to apply mathematics and statistics concepts in the context of more than one science discipline.	Candidate can explain and use mathematics and statistics in the context of a science discipline.	Candidate is unable to use mathematics and statistics concepts in the context of a science discipline.
3.1 Candidate summarizes current theories related to pedagogy and learning.	Candidate is able to critique research and theories related to pedagogy and learning.	Candidate demonstrates in-depth knowledge of instructional strategies and theories related to pedagogy and learning in their field.	Candidate demonstrates limited understanding of the relationship between content and content-specific pedagogy, is unable to explain linkages between theory and practice.
3.2 Candidate applies a variety of research-based instructional strategies to promote student learning.	Candidate demonstrates expertise in pedagogical content knowledge and preconceptions that hinder learning; is able to select and develop instructional strategies and technologies, based on research and experience, that help all students learn.	Candidate is able to select and use a broad range of instructional strategies and technologies that promote student learning and is able to clearly explain the choices used in their practice.	Candidate is unable to select or use a broad range of instructional strategies that build on students' backgrounds and knowledge of content.

MSEd IN SCIENCE/MATH EDUCATION
Rubric for Capstone Project

Target	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
4.1 Candidates evaluate their instruction relative to standards and "best practices" in science/ math education.	Candidate has in-depth knowledge of science/math standards and best practices and is able to share expertise with other professionals.	Candidate is familiar with science/math standards and best practices and is able to identify areas where professional development is needed.	Candidate is unfamiliar with science/math standards and best practices.
4.2 Candidates plan science/math curriculum units that are aligned with state and/or national science education standards.	Candidate plans lessons that are consistent with the goals of scientific and mathematics literacy; adapts or creates materials and instructional strategies as needed to implement a standards-based curriculum; engages students in activities that develop scientific and mathematics processes; addresses preconceptions that may hinder learning.	Candidate plans lessons that are consistent with science / mathematics standards.	Candidate does not plan lessons that are consistent with science / mathematics standards.
5.1 Candidates plan multi-faceted assessment strategies that are aligned with goals of instruction.	Candidate plans multiple assessment strategies that are well-matched to the lesson objectives, the needs of students, and the methods of instruction.	Candidate plans multiple assessment strategies that are matched to the lesson objectives and the needs of students.	Candidate does not plan to use multiple assessment strategies OR assessments are not matched to lesson objectives
5.2 Candidates analyze student performance data to assess both teaching and learning.	Candidate draws conclusions regarding student performance that are consistent with assessment data; use data from multiple assessments to make decisions regarding teaching strategies.	Candidate attempts to analyze student performance based on assessment data.	Candidate's conclusions are not based on assessment data.
5.3 Candidates reflect on their practice to identify strengths and areas for improvement.	Candidate engages in thoughtful, thorough, and continuous self-evaluation; identifies specific aspects of instruction to improve as well as aspects that resulted in student learning.	Candidate reflects on effectiveness of instruction and identifies specific aspects of instruction to improve.	Candidate is unable to adequately reflect on teaching performance.

Exit Survey Results Summary

	2012-13	2013-14	Weighted Mean
Number of respondents	2	9	
My program has further contributed to my understanding of my content area	5.00	4.89	4.91
My program has further contributed to my understanding of the structure and central concepts of my content area.	4.00	4.67	4.55
My program has further contributed to my understanding of the purposes of schooling in a diverse and democratic society.	4.00	3.89	3.91
My program has further contributed to my understanding of the purposes of professional practice in a diverse and democratic society.	4.00	4.11	4.09
My program has further contributed to my understanding of the concept of data collection to enhance learning for all learners within my content area.	4.00	4.67	4.55
My program has further contributed to my understanding of the concept of evaluation to enhance learning for all learners within my content area.	4.50	4.56	4.55
My program has further contributed to my understanding of the tools of inquiry and research for expanding knowledge and/or solving problems in the workplace.	4.50	4.33	4.36
My program has taught me how to work productively with others.	4.00	4.00	4.00
My program has taught me how to work productively with others to facilitate positive influences on decision-making effecting learning of all learners in professional settings.	4.00	4.22	4.18
My program has taught me how to independently evaluate impact of instruction, treatment/intervention/management decisions (whichever applies to you) on the welfare of those served.	4.00	4.22	4.18
My program has taught me how to be responsible to the profession as defined by my specific program	4.00	4.44	4.36
My program has taught me how to be a leader in my content area.	4.00	4.00	4.00
My program has taught me how to be an advocate for individuals to foster learning for all learners.	4.00	4.11	4.09
My program has taught me how to be an advocate at systemic levels to foster learning for all learners.	3.50	3.89	3.82
I have the skills to collect data within my specific content area.	4.50	4.44	4.45
I have the skills to collect data within my specific content area to guide the planning of specialization specific methodology to enhance learning of all learners.	4.00	4.56	4.46
I have the skills to analyze data within my specific content area.	4.50	4.67	4.64
I have the skills to analyze data within my specific content area to guide the planning of specialization specific methodology to enhance learning of all learners.	4.00	4.33	4.27
I have the skills to utilize technology appropriate to my content area to deliver instruction.	4.50	4.67	4.64
I have the skills to utilize technology appropriate to my content area to manage information.	4.00	4.78	4.64
OVERALL AVERAGE SCORE	**4.15**	**4.37**	4.33

Employer Survey

Directions: Please indicate your rating of the educator's performance on each standard according to the following rubric. For each standard, example indicators are provided to clarify and develop the standard but are not an exhaustive list. There is a text box at the end of the evaluation for you to include comments.

1 = Beginning/Novice The educator demonstrates serious difficulties with implementation of this standard; he/she exhibits a lack of awareness about the need for and/or the ways to demonstrate the standard.	2 = Progressing The educator demonstrates occasional difficulties with implementation of the standard, but is generally successful and able to handle situations independently.	3 = Proficient The educator consistently demonstrates what is expected for the standard.

Learning Environments. The educator works with others to create environments that support individual and collaborative learning, and that encourage positive social interaction, active engagement in learning, and self-motivation.

- Collaborate with students and colleagues to develop shared values and expectations for respectful interactions, rigorous academic discussions, and individual and group responsibility for quality work
- Manage the learning environment to actively and equitably engage students by organizing, allocating, and coordinating the resources of time, space, and students' attention
- Communicate verbally and nonverbally in ways that demonstrate respect for and responsiveness to the cultural backgrounds and differing perspectives students bring to the learning environment
- Promote responsible student use of interactive technologies
- Develop learning experiences that engage students in collaborative and self-directed learning
- Demonstrate/Model a firm commitment to the core democratic principles of freedom (liberty), equality, and justice in ways that help prepare others for productive living in a democratic society.
- Demonstrates a belief that all learners can be successful and an understanding of the impact of diverse perspectives and experiences on learning.

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Content Knowledge. The educator understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for students to assure mastery of the content. This includes the ability to integrate literacy skills and Nebraska Content Standards into instruction.

- Effectively use multiple representations and explanations that capture key ideas in the discipline
- Engage students in learning experiences in the discipline(s) that encourage students to understand, question, and analyze ideas from diverse perspectives
- Stimulate student reflection on prior content knowledge, link new concepts to familiar concepts, and make connections to students' experiences
- Use supplementary resources and technologies effectively to ensure accessibility and relevance for all students
- Evaluate and modify instructional resources and curriculum materials

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Assessment. The educator understands and uses multiple methods of assessment to engage students in their own growth, to monitor student progress, and to guide the teacher candidate's and student's decision making.

- Balance the use of formative and summative assessment as appropriate to support, verify, and document learning
- Design assessments that match learning objectives with assessment methods and minimizes sources of bias
- Work independently and collaboratively to examine test and other performance data
- Effectively use multiple and appropriate types of assessment data
- Engage students in understanding and identifying quality work
- Provide students with effective descriptive feedback to guide their progress toward that work.
- Engage students in multiple ways of demonstrating knowledge and skill as part of the assessment process
- Continually seek appropriate ways to employ technology to support assessment practice

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Planning for Instruction. The educator plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, technology, and pedagogy, as well as knowledge of students and the community context.

- Individually and collaboratively select and create learning experiences that are appropriate for curriculum goals and content standards, and are relevant to students
- Plan how to achieve each student's learning goals
- Choose appropriate strategies and accommodations, resources, and materials to differentiate instruction for individuals and groups of students
- Plan for instruction based on formative and summative assessment data, prior student knowledge, and student interest
- Plan collaboratively with professionals who have specialized expertise
- Evaluate plans in relation to short- and long-range goals
- Systematically adjust plans to meet each student's learning needs and enhance learning
- Develop appropriate sequencing of learning experiences
- Provides multiple ways to demonstrate knowledge and skill

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Instructional Strategies. The educator understands and uses a variety of instructional strategies to encourage students to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways. This includes developing competency for utilizing technology for instruction, assessment, and communication.

- Uses appropriate strategies and resources to adapt instruction to the needs of individuals and groups of students
- Continuously monitor student learning, engage students in assessing their progress, and adjust instruction in response to student learning needs
- Collaborate with students to design and implement relevant learning experiences
- Vary his/her role in the instructional process (e.g., instructor, facilitator, coach, audience) in relation to the content and purposes of instruction and the needs of students
- Provide multiple models and representations of concepts and skills
- Engage all students in developing higher order questioning skills and metacognitive processes
- Engage students in using a range of learning skills and technology tools
- Ask questions to stimulate discussion that serves different purposes

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Professional Learning and Ethical Practice. The educator engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effects of his/her choices and actions on others (students, families, other professionals, and the community), and adapts practice to meet the needs of each student.

- Engage in ongoing learning opportunities to develop knowledge and skills
- Engage in meaningful and appropriate professional learning experiences
- Advocate, model, and teach safe, legal, and ethical use of information and technology
- Use a variety of data to evaluate the outcomes of teaching and learning and to adapt planning and practice
- Reflect on his/her personal biases and accesses resources to deepen his/her own understanding of cultural, ethnic, gender, and learning differences
- Demonstrates the ability to evaluate the impact and refine instruction/treatment (intervention).
- Engages in reflective management decisions for the welfare of those served.
- Selects and analyses appropriate assessment strategies for individuals or systems served.

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

Leadership and Collaboration. The educator seeks opportunities to take responsibility for student learning, to collaborate with students, families, colleagues, and other school professionals, and community members to ensure student growth, and to advance the profession.

- Take an active role on the instructional team
- Work with other school professionals to plan and jointly facilitate learning
- Work collaboratively with students and their families to establish mutual expectations and ongoing communication
- Use technological tools and a variety of communication strategies to build local and global learning communities
- Advocates at individual and systemic levels.
- Facilitates positive influences on decision-making affecting those served.

1. Beginning / Novice	2. Progressing	3. Proficient
○	○	○

>>

Appendix B:

Science/Math Education faculty *vitae*

Stefania C. Panaitof
Biology
(308) 865-1572
Email: panaitofsc@unk.edu

Academic Degrees

PhD, University of New Hampshire, 2006.

Major: Zoology

Dissertation Title: Physiological bases of biparental care in the burying beetles, Nicrophorus orbicollis

Postgraduate Diploma in Advanced Studies, University of Bucharest, 1999.

Major: Neurobiology

Licence Diploma, University of Bucharest, 1997.

Major: Biology

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 13, 2012

Date Attained Rank of Assistant Professor: August 13, 2012

Teaching

Scheduled Teaching

Fall 2012

BIOL 215, Human Physiology, 4 credit hours, 20 students enrolled, On Campus.

BIOL 215, Human Physiology, 0 credit hours, 20 students enrolled, On Campus.

Spring 2013

BIOL 226, Anat/Physio, 0 credit hours, 23 students enrolled, On Campus.

BIOL 226, Anat/Physio, 0 credit hours, 17 students enrolled, On Campus.

BIOL 226, Anat/Physio, 0 credit hours, 20 students enrolled, On Campus.

BIOL 404, Developmental Biology, 3 credit hours, 6 students enrolled, On Campus.

BIOL 404, Developmental Biology, 0 credit hours, 6 students enrolled, On Campus.

Fall 2013

BIOL 215, Human Physiology, 4 credit hours, 10 students enrolled, On Campus.

BIOL 215, Human Physiology, 0 credit hours, 10 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 21 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 22 students enrolled, On Campus.

Fall 2014

BIOL 215, Human Physiology, 4 credit hours, On Campus.

BIOL 215, Human Physiology, 0 credit hours, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, On Campus.

BIOL 880, Seminar, 1 credit hours, On Campus.

Directed Student Learning

"Cloning of a dopamine receptor from the burying beetle brain," Biology. (January 13, 2014 - Present).
Advised: Becky Frerichs

"Role of CNTNAP2 knockdown in zebra finch neurons," Biology. (August 26, 2013 - Present).
Advised: Madelyn Warren

Biology. (August 26, 2013 - December 19, 2013).
Advised: Taylor Hyatt

"Cloning an octopamine receptor from the burying beetle, Nicrophorus orbicollis," Biology. (January 7, 2013 - May 3, 2013).
Advised: Taylor Hyatt

Scholarship

Intellectual Contributions

Panaitof, S. C. (2012). A songbird animal model for dissecting the genetic bases of autism spectrum disorder. *Disease Markers, 33*, 241-249.
http://iospress.metapress.com/content/h440876p60k31461/?p=abcefa082a104994b35102f5e555b22a&pi=2

Panaitof, S. C. (2010). Language- related Cntnap2 gene is differentially expressed in sexually dimorphic song nuclei essential for vocal learning in songbirds. *Journal of Comparative Neurology, 518*(1995-2018).

Presentations

Panaitof, S. C. (Author), W. (Author & Presenter). Nebraska Neuroscience Symposium, "Role of language-related FOXP2 and CNTNAP2 in vocal learning," EPSCoR, Omaha, NE. (September 24, 2014).

Taylor, H. (Author), Panaitof, S. C. (Author & Presenter). Nebraska INBRE Annual Meeting, "The search for an octopamine receptor in the burying beetles," NIH, Grand Island NE. (August 4, 2013).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Panaitof, S. C., "INBRE," Grant, Sponsored by NIH, Federal, $54,000.00. (May 2013 - May 2014).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), Reichart, L. M. (Co-Principal), Bourret, T. J. (Co-Principal), Panaitof, S. C. (Co-Principal), "Nebraska Training Network and Functional Genomics," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $1,275,620.00. (April 2009 - March 2014).

Service

Professional Memberships

Society for Neuroscience. (2008 - Present).

American Association for the Advancement of Science. (2003 - Present).

Service – Department

Committee Member, IACUC. (June 2013 - Present).

Committee Member, Graduate Research. (May 2013 - Present).

Dr. Casey W. Schoenebeck
Biology
Email: schoenebeccw@unk.edu

Administrative Data – Permanent

Starting Rank: Assistant Professor
Start Date at University of Nebraska at Kearney: April 1, 2009
Date Attained Rank of Assistant Professor: April 1, 2009
Date Attained Rank of Associate Professor: August 19, 2013

Teaching

Scheduled Teaching

Fall 2010

BIOL 881, Current Issues In Biology, 1 credit hours, 22 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 21 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 36 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.

Spring 2011

BIOL 830P, Spec Topics In Biology, 3 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 26 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 26 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 24 students enrolled, Web Based.

Summer 2011

BIOL 830P, Special Topics in Biology, 3 credit hours, 14 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 17 students enrolled, Web Based.

Fall 2011

BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 24 students enrolled, Web Based.

Spring 2012

BIOL 830P, Special Topics in Biology, 3 credit hours, 2 students enrolled, On Campus.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 24 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 23 students enrolled, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, 9 students enrolled, Web Based.
BIOL 883, Aquatic Trophic Ecology, 3 credit hours, 22 students enrolled, Web Based.

Summer 2012

BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 14 students enrolled, Web Based.
BIOL 887, Fisheries Ecology, 3 credit hours, 11 students enrolled, Web Based.

Fall 2012

BIOL 881, Current Issues In Biology, 1 credit hours, 24 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 23 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 23 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 24 students enrolled, Web Based.

Spring 2013

BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 18 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 11 students enrolled, Web Based.
BIOL 883, Aquatic Trophic Ecology, 3 credit hours, 10 students enrolled, Web Based.

Summer 2013

BIOL 881, Current Issues In Biology, 1 credit hours, 25 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 21 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 15 students enrolled, Web Based.
BIOL 887, Fisheries Ecology, 3 credit hours, 12 students enrolled, Web Based.

Fall 2013

BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 881, Current Issues In Biology, 1 credit hours, 21 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 21 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 22 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.

Spring 2014

BIOL 830P, Special Topics in Biology, 3 credit hours, 4 students enrolled, On Campus.
BIOL 881, Current Issues In Biology, 1 credit hours, 19 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.
BIOL 881, Current Issues In Biology, 1 credit hours, 19 students enrolled, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, 19 students enrolled, Web Based.

Summer 2014

BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, 20 students enrolled, Web Based.

Fall 2014

BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, On Campus.

BIOL 307, Ecology, 3 credit hours, On Campus.

BIOL 307, Ecology, 0 credit hours, On Campus.

BIOL 307H, Ecology, 3 credit hours, On Campus.

BIOL 307H, Ecology, 0 credit hours, On Campus.

BIOL 881, Current Issues In Biology, 1 credit hours, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, Web Based.

BIOL 881, Current Issues In Biology, 1 credit hours, Web Based.

Directed Student Learning

Directed Individual. (2014).
Advised: Briana Pallas

Directed Individual. (2014).
Advised: Chase Svoboda

Directed Individual. (2014).
Advised: Cooper Bollman

Directed Individual. (2014).
Advised: James Hobbs

Directed Individual. (2014).
Advised: Jonathon Newkirk

Directed Individual. (2014).
Advised: Maria Chaney

Directed Individual. (2014).
Advised: Micah Bowman

Directed Individual. (2014).
Advised: Tiffany Seder

Master's Thesis Committee Chair. (2014).
Advised: Zach Woiak

Master's Thesis Committee Member. (2014).
Advised: Erik Prenosil

Master's Thesis Committee Member. (2014).
Advised: Jeremy Grauf

Directed Individual. (2013).
Advised: Landon Ziemba

Master's Thesis Committee Member. (2013).
Advised: Robert Kill

Directed Individual. (2012).
Advised: Brett Roberg

Directed Individual. (2012).
Advised: Lacey Hopper

Directed Individual. (2012).
Advised: Shaun Miller

Master's Thesis Committee Chair. (2012).
Advised: Chris Uphoff

Master's Thesis Committee Chair. (2012).
Advised: Seth Lundgren

Master's Thesis Committee Member. (2012).
Advised: Alexis Maple

Master's Thesis Committee Member. (2012).
Advised: David Schumann

Directed Individual. (2011).
Advised: Brian Podwinski

Directed Individual. (2011).
Advised: Carey Sedlacek

Directed Individual. (2011).
Advised: Chrissandra Palermo

Directed Individual. (2011).
Advised: Heather Seites

Directed Individual. (2011).
Advised: Jason Obermiller

Directed Individual. (2011).
Advised: Sue Panton

Master's Thesis Committee Member. (2010).
Advised: Chelsey Pasbrig

Scholarship

Intellectual Contributions

Lundgren, S., Schoenebeck, C. W., Koupal, K., Lorenzen, J., Huber, C. (2014). Quantification and evaluation of factors influencing largemouth bass predation of stocked advanced fingerling yellow perch. *North American Journal of Fisheries Management, 34*, 167-173.

Schoenebeck, C. W., Turco, M., Fahrlander, R. M., Darveau, K. M., Freeman Jr, T. L. (2014). Sex and Age Group Specific Changes in Body Condition of Red-tailed Hawks (Buteo jamaicensis) Wintering in Central Nebraska. *Wilson Journal of Ornithology, 126*(3).

Olds, B., Peterson, B. C., Koupal, K. D., Schoenebeck, C. W., Farnsworth Hoback, K. M., Hoback, W. W. (2014). Zooplankton density increases in an irrigation reservoir during drought conditions. *Transactions of Nebraska Academy of Sciences*(34), 27-32. digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1466&context=tnas

Schoenebeck, C. W., Peterson, B. C. (2014). Evaluation of Hunter Antler-Size Selection through an Age-Specific Comparison of Harvested Antler Metrics with Naturally Cast Antlers. *Journal of Fish and Wildlife Managemet, 5*(1), 167-173. www.fwspubs.org/doi/pdf/10.3996/032013-JFWM-022

Schoenebeck, C. W., Peterson, B. C., Obermiller, J. (2013). Accuracy of Antler Metrics in Predicting Age of White-tailed Deer and Mule Deer. *Great Plains Research, 23*, 33-37.

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2013). Assessment of a Rotenone Application Event at Morman Island West Lake in Central Nebraska. *Nebraska Academy of Sciences, 33*, 1-6.

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2013). *Community assessment of physiochemical attributes, zooplankton, macroinvertebrates, and predator-prey interactions involving fish in Harlan County Reservoir. Federal Aid to Fish Restoration: Annual Performance Report 2011-2013*.

Uphoff, C., Schoenebeck, C. W., Koupal, K., Hoback, W. W., Pope, K. (2013). Degree-day accumulation influences annual variability in growth of age-0 walleye. *Fisheries Research, 147*, 394-398.

Schumann, D., Koupal, K. D., Schoenebeck, C. W., Hoback, W. W. (2013). Evaluation of sprayed fluorescent pigment as a method to mass-mark fish. *The Open Fish Science Journal, 6*, 41-47.

Spengler, D., Schaeffer, T., Schoenebeck, C. W., Brown, M. (2013). The influence of compensatory feeding regimes on oxytetracycline uptake and otlith score in yellow perch Perca flavescens. *The Open Fish Science Journal*(6), 92-98.

Katt, J., Koupal, K., Schoenebeck, C. W., Hoback, W. (2012). Assessment of a new gear to sample walleye eggs. *North American Journal of Fisheries Management, 32*, 44-48.

Schoenebeck, C. W., Brown, M. (2012). Does anaerobic activity differ seasonally or between sexes in yellow perch populations? *Transactions of the American Fisheries Society, 141*, 199-203.

Schaeffer, T., Spengler, D., Schoenebeck, C. W., Brown, M., Chipps, S. (2012). Effect of feeding-fasting cycles on oxygen consumption and bioenergetics of female yellow perch. *Transactions of the American Fisheries Society*(141), 1480-1491.

Schoenebeck, C. W., Brown, M., Chipps, S., German, D. (2012). Nutrient and algal responses to winterkilled fish-derived nutrient subsidies in eutrophic lakes. *Lake and Reservoir Management*, 189-199.

Uphoff, C., Schoenebeck, C. W. (2012). Quantifying inter-population variability in yellow perch sexual size dimorphism. *Journal of Freshwater Ecology, 27*, 507-516.

Lundgren, S. A., Geluso, K., Schoenebeck, C. W. (2012). Terrestrial and semi-aquatic vertebrates in diets of largemouth bass (Micropterus salmoides) in central Nebraska. *Prairie Naturalist, 44*, 105-108.

Katt, J., Peterson, B. C., Koupal, K. D., Schoenebeck, C. W., Hoback, W. W. (2011). Changes in Relative Abundance of Adult Walleye and Egg Density Following the Addition of Walleye Spawning Habitat in a Midwest Irrigation Reservoir. *Journal of Freshwater Ecology, 26*, 51-58.

Sullivan, C., Koupal, K. D., Hoback, W. W., Peterson, B. C., Schoenebeck, C. W. (2011). Food Habits and Abundance of Larval Freshwater Drum in a South-Central Nebraska Irrigation Reservoir. *Journal of Freshwater Ecology, 27*, 111-121.

Schoenebeck, C. W., Brown, M. (2011). Gender- and year-specific mortality of yellow perch with evidence of compensatory mortality. *North American Journal of Fisheries Management, 31*, 474-482.

Sullivan, C., Schoenebeck, C. W., Koupal, K. D., Hoback, W. W., Peterson, B. C. (2011). Patterns of Age-0 Gizzard Shad Abundance and Food Habits in a Nebraska Irrigation Reservoir. *Prairie Naturalist, 43*, 110-116.

Olds, B., Peterson, B. C., Koupal, K. D., Farnsworth Hoback, K. M., Schoenebeck, C. W., Hoback, W. W. (2011). Water Quality Parameters of Nebraska Reservoir Differ Between Drought and Normal Conditions. Lake and Reservoir Management. *Lake and Reservoir Management, 27*, 229-234.

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2010). *Community assessment of zooplankton, larval gizzard shad, productivity, and physiochemical attributes in Harlan County Reservoir. Federal Aid to Fish Restoration: Annual Performance Report 2009-2010*.

Katt, J., Schoenebeck, C. W., Koupal, K. D., Peterson, B. C., Hoback, W. W. (2010). Correlation of Mature Walleye Relative Abundance to Egg Density. *The Prairie Naturalist, 42*, 145-147.

Schoenebeck, C. W., Brown, M., Lucchesi, D. (2010). Potential importance of competition, predation, and prey on yellow perch growth from two dissimilar population types. *The Prairie Naturalist, 42*, 116-122.

Presentations

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). 63rd Annual Great Plains Fisheries Workers Association Workshop, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.." (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). 74th Annual Midwest Fish and Wildlife Conference, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kansas City, MO. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). 74th Midwest Fish and Wildlife Conference, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.," Kansas City, MO. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). Iowa – Nebraska Joint American Fisheries Society Meeting, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.," American Fisheries Society Meeting. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). Joint Meeting of Nebraska and Iowa Chapters of the American Fisheries Society, "Characterizing the abiotic and biotic components of Nebraska I-80 lakes: implications for growth of stocked fish," Council Bluffs, IA. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). UNK Student Research Day, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kearney, NE. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Carlson, K. A. (Author), Koupal, K. D. (Author). Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries Society, "Picking from the menu: age - 0 walleye food habits and ontogenetic diet. d," Joint Meeting with the Esocid and Centrachid Technical Committees, La Crosse, WI. (July 2014).

Woiak, Z. (Author), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). UNK Student Research Day, "The Impacts of Ontogenetic Diet Shifts on the Growth Potential of Age-0 Walleye," University of Nebraska at Kearney, Kearney, NE. (April 10, 2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). IA-NE Joint Chapter Meeting of the American Fisheries Society, "Seasonal and Annual Changes in Taxa-specific Zooplankton Density during a Complete Drought Cycle," Council Bluffs, IA. (February 2014).

Schoenebeck, C. W. (Author & Presenter), Peterson, B. C. (Author). 74th Midwest Fish and Wildlife Conference, "Using cast antlers to assess the age-specific antler selectivity of white-tailed deer hunters," Kansas City, MO. (January 28, 2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). 74th Midwest Fish and Wildlife Conference, "Seasonal and Annual Changes in Taxa-specific Zooplankton Density during a Complete Drought Cycle," Kansas City, MO. (January 26, 2014).

Lundgren, S., Schoenebeck, C. W., Koupal, K. 143rd Annual Meeting of the American Fisheries Society, "Assessment of predator functional density on mortality of stocked yellow perch," Little Rock, Arkansas. (2013).

Koupal, K., Katt, J., Schoenebeck, C. W. Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries Society, Joint Meeting with the Esocid and Centrarchid Technical Committees, "Evaluating walleye population response to a regular change," Wausau, Wisconsin. (2013).

Pawlak, R., Schoenebeck, C. W., Koupal, K. Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries Society, Joint Meeting with the Esocid and Centrarchid Technical Committees, "Potential dietary competition between bluegill and yellow perch: management implications for establishing yellow perch fisheries in Nebraska.," Wausau, Wisconsin. (2013).

Koupal, K., Katt, J., Schoenebeck, C. W. Nebraska Game and Parks Commission Annual Management Section Meeting, "Swimming in Sherman Reservoir walleye: implications for production and management." (2013).

Freeman Jr, T. L. (Author & Presenter), Schoenebeck, C. W. (Author). The Crane Trust 2nd Annual Research Symposium, "Road Surveys as an Index of Diurnal Bird of Prey Abundance in South-Central Nebraska," Crane Trust, Wood River, NE. (October 18, 2013).

Peterson, B. C. (Author & Presenter), Schoenebeck, C. W. (Author). The Crane Trust 2nd Annual Research Symposium, "Using cast antlers to assess the age-specific antler selectivity of white-tailed deer hunters within the Platte River Valley," Crane Trust, Alda, Nebraska. (October 18, 2013).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries

Society, "Investigating the impact of ontogenetic diet shifts on the growth of age-0 walleye," Joint Meeting with the Esocid and Centrachid Technical Committees, Wausau, WI. (July 2013).

Ziemba, L. (Author & Presenter), Schoenebeck, C. W. (Author), Peterson, B. C. (Author), Obermiller, J. (Author). 15th Annual Student Research Day, "Drought Impacts and Predicting White-tailed Deer Age Using Antler Metrics in South-central Nebraska.," University of Nebraska at Kearney, Kearney, Nebraska. (April 2013).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C., Hoback, W. W. (Author). 15th Annual Student Research Day, "Seasonal Changes in Zooplankton Density within Harlan County Reservoir.," University of Nebraska at Kearney, Kearney, Nebraska. (April 2013).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author). Nebraska Chapter of the American Fisheries Society, "Seasonal and Annual Changes in Zooplankton Density within Harlan County Reservoir," Gretna, Nebraska. (February 2013).

Schoenebeck, C. W. (Author & Presenter), Peterson, B. C. (Author), Obermiller, J. A. (Author). 73rd Midwest Fish and Wildlife Conference, "Accuracy of Predicting White-tailed Deer and Mule Deer Age Using Antler Metrics in South-Central Nebraska," Wichita, Kansas. (December 2012).

Katt, J. D. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). 71st Midwest Fish and Wildlife Conference, "Correlation of Walleye Electrofishing and Gill Net Captures Rates to Walleye Egg Density in Sherman Reservoir, Nebraska," Minneapolis, Minnesota. (December 2010).

Sullivan, C. L. (Author & Presenter), Uphoff, C. S. (Author), Koupal, K. D. (Author), Hoback, W. W. (Author), Peterson, B. C. (Author), Schoenebeck, C. W. (Author). 71st Midwest Fish and Wildlife Conference, "Freshwater Drum Food Habits in a South-Central Irrigation Reservoir," Minneapolis, Minnesota. (December 2010).

Katt, J. (Author & Presenter), Koupal, K. D. (Author), Schoenebeck, C. W. (Author), Peterson, B. C. (Author), Hoback, W. W. Nebraska Chapter of the American Fisheries Society, "Changes in walleye egg density and adult abundances due to the addition of cobble substrate in Sherman Reservoir.," Ponca, Nebraska. (February 2010).

Sullivan, C. (Author & Presenter), Uphoff, C. (Author), Koupal, K. D. (Author), Hoback, W. W. (Author), Peterson, B. C. (Author), Schoenebeck, C. W. (Author). Nebraska Chapter of the American Fisheries Society, "Freshwater Drum Food Habits in a South-Central Irrigation Reservoir.," Ponca, Nebraska. (February 2010).

Olds, B. (Author & Presenter), Peterson, B. C. (Author), Koupal, K. D. (Author), Farnsworth Hoback, K. M. (Author), Schoenebeck, C. W. (Author), Hoback, W. W. (Author). Nebraska Chapter of the American Fisheries Society, "Unexpected changes in turbidity and chlorophyll in a Nebraska reservoir following severe drought.," Ponca, Nebraska. (February 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Katt, J., Koupal, K., Schoenebeck, C., Eifert, B., "Sex-specific changes in walleye abundance, size structure, and harvest following implementation of regulation to protect broodstook," Grant, $10,140.00. (2015 - 2020).

Shaffer, J. J. (Supporting), Schoenebeck, C. W. (Supporting), Koupal, K. D. (Principal), "Investigation of Conservation Management for Plains Topminnow in Nebraska," Grant, Sponsored by State Wildlife Grant, State, $31,800.00. (October 2014 - December 2017).

Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Changes in community energy flow of Nebraska lakes following restoration efforts using stable isotope analysis," Grant, Sponsored by United States Fish and Wildlife Service, Federal, $5,000.00. (2012 - 2017).

Koupal, K., Shaffer, J., Schoenebeck, C., "Investigation of conservation management for plains topminnow," Grant, $66,389.00. (2014 - 2016).

Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Production of yellow perch in Nebraska lakes," Grant, Sponsored by Nebraska Game and Parks Sport Fisheries Fund, State, $331,245.00. (2010 - 2015).

Hoback, W. W. (Co-Principal), Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Limnological assessment of Harlan County Reservoir 2010-1014," Grant, Sponsored by Nebraska Game and Parks Sport Fisheries Fund, State, $472,744.00. (2010 - 2014).

Peterson, B. C. (Co-Principal), Schoenebeck, C. W. (Co-Principal), "Thompson Scholar Mentor Professional Development Stipend," Grant, Sponsored by Thompson Scholar Program, University of Nebraska at Kearney, $400.00. (2013).

Service

Professional Memberships

Sigma Xi, University of Nebraska at Kearney Chapter. (2012 - Present).

North American Lake Management Society. (2011 - Present).

Great Plains Fishery Workers Association. (2010 - Present).

Nebraska Chapter, American Fisheries Society. (2009 - Present).

American Fisheries Society. (2001 - Present).

Academic Advising

Master's Thesis Committee Chair. (2014).
Advised: Zach Woiak

Master's Thesis Committee Member. (2014).
Advised: Erik Prenosil

Master's Thesis Committee Member. (2014).
Advised: Jeremy Grauf

Master's Thesis Committee Member. (2013).
Advised: Robert Kill

Master's Thesis Committee Chair. (2012).
Advised: Chris Uphoff

Master's Thesis Committee Chair. (2012).
Advised: Seth Lundgren

Master's Thesis Committee Member. (2012).
Advised: Alexis Maple

Master's Thesis Committee Member. (2012).
Advised: David Schumann

Master's Thesis Committee Member. (2010).
Advised: Chelsey Pasbrig

Service – Department

Committee Member, Assistant Professor of Biology Search Committee (Plant emphasis). (2013 - Present).

Committee Chair, Graduate Program Assessment and Curriculum Mapping Committee. (2011 - Present).

Committee Member, Assistant Professor of Biology Search Committee (Sustainability emphasis). (2014 - 2015).

Committee Member, Assistant Professor of Biology Search Committee (Anatomy and Physiology). (2011 - 2012).

Service – College

Assessment Committee, University of Nebraska at Kearney, Representative. (2013 - Present).

Committee Member, Faculty Senate, University of Nebraska at Kearney, eCampus Representative. (2013 - Present).

Committee Member, Student Travel Policy Committee, University of Nebraska at Kearney, Representative. (2013 - Present).

Committee Member, Science Day Steering Committee and Instructor, . (2012 - Present).

Judge, Nebraska Junior Academy of Sciences, University of Nebraska at Kearney, College of Natural and Social Science. (2012).

Service – University

Adjunct Assistant Professor, University of Nebraska at Lincoln, School of Natural Resources, Lincoln, Nebraska. (2009 - Present).

Committee Member, Thesis Committee Member, Robert Kill, University of Nebraska at Lincoln. (2012 - 2013).

Nebraska Master Naturalist Instructor, University of Nebraska. (2012).

Committee Member, Thesis Committee Member, Alexis Maple, University of Nebraska at Lincoln. (2010 - 2011).

Service – Professional

Officer, President/Elect/Past, Nebraska Chapter of the American Fisheries Society. (2014 - Present).

Kansas Department of Wildlife, Parks and Tourism. (2013 - Present).

Reviewer, Journal Article, Fisheries Research. (2012 - Present).

Walleye Technical Committee Representative, Nebraska Chapter, American Fisheries Society. (2012 - Present).

Committee Member, Awards Committee, Nebraska Chapter, American Fisheries Society. (2011 - Present).

Reviewer, Journal Article, Ecology of Freshwater Fish. (2010 - Present).

Reviewer, Journal Article, Fisheries. (2010 - Present).

Reviewer, Journal Article, Journal of Aquatic Ecology. (2009 - Present).

Annual propagation meeting, Nebraska Game and Parks. (2009 - Present).

Walleye broodstock collection and male population estimate, Nebraska Game and Parks. (2009 - Present).

Reviewer, Journal Article, Journal of Freshwater Ecology. (2008 - Present).

Reviewer, Journal Article, North American Journal of Fisheries Management. (2008 - Present).

Reviewer, Journal Article, Prairie Natulist. (2008 - Present).

Reviewer, Journal Article, Transactions of the American Fisheries Society. (2008 - Present).

Esocid Technical Committee, North Central Division, American Fisheries Society. (2003 - Present).

Walleye Technical Committee, North Central Division, American Fisheries Society. (2003 - Present).

Other

Faculty Development Activities Attended

Conference Attendance, "Student Research Day," University of Nebraska at Kearney. (2012 - Present).

Conference Attendance, "Annual Meeting of the Nebraska Chapter of the American Fisheries Society." (2009 - Present).

Conference Attendance, "Annual Midwest Fish and Wildlife Conference." (2003 - Present).

Workshop, "Degree Audit Training," University of Nebraska at Kearney, UNK Registrar’s Office. (2013).

Dr. Dawn M. Simon
Biology
(308) 865-8470
Email: simondm@unk.edu

Academic Degrees

PhD, University of Iowa, 2004.

Major: Molecular Evolution

Dissertation Title: Comparative analysis of group I intron evolution in microbial eukaryotes

BS, University of Iowa, 1996.

Major: Biology

Dissertation Title: Characterization of photosynthetic mutants in Chlamydomonas reinhardtii

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: January 5, 2009

Date Attained Rank of Assistant Professor: January 5, 2009

Academic, Government, Military and Professional Positions

Associate Professor, University of Nebraska at Kearney, Academic - Post-Secondary. (August 2013 - Present).

Assistant Professor, University of Nebraska at Kearney, Academic - Post-Secondary. (January 2009 - August 2013).

Postdoctoral Fellow, University of Calgary, Academic - Post-Secondary. (January 2005 - November 2008).

Research and Teaching Assistant, University of Iowa, Academic - Post-Secondary. (August 1997 - December 2004).

Teaching

Scheduled Teaching

Fall 2010

BIOL 290, Evolution, 3 credit hours, 32 students enrolled, On Campus.

BIOL 290H, Evolution, 3 credit hours, 1 students enrolled, On Campus.

BIOL 880, Seminar, 1 credit hours, 11 students enrolled, On Campus.

Spring 2011

BIOL 290, Evolution, 3 credit hours, 19 students enrolled, On Campus.

BIOL 290H, Evolution, 3 credit hours, 2 students enrolled, On Campus.

BIOL 325, Med Terminology, 1 credit hours, 60 students enrolled, On Campus.

BIOL 325, Med Terminology, 1 credit hours, 28 students enrolled, On Campus.

BIOL 480, Seminar, 1 credit hours, 1 students enrolled, On Campus.

BIOL 830P, Spec Topics In Biology, 3 credit hours, 21 students enrolled, Web Based.

BIOL 880, Seminar, 1 credit hours, 7 students enrolled, On Campus.

Fall 2011

BIOL 290, Evolution, 3 credit hours, 25 students enrolled, On Campus.

BIOL 325, Med Terminology, 1 credit hours, 55 students enrolled, On Campus.

BIOL 325, Med Terminology, 1 credit hours, 20 students enrolled, On Campus.

BIOL 880, Seminar, 1 credit hours, 13 students enrolled, On Campus.

Spring 2012

BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 290, Evolution, 3 credit hours, 23 students enrolled, On Campus.
BIOL 290H, Evolution, 3 credit hours, 1 students enrolled, On Campus.
BIOL 325, Med Terminology, 1 credit hours, 60 students enrolled, Web Based.
BIOL 325, Med Terminology, 1 credit hours, 59 students enrolled, Web Based.
BIOL 880, Seminar, 1 credit hours, 8 students enrolled, On Campus.

Fall 2012

BIOL 290, Evolution, 3 credit hours, 33 students enrolled, On Campus.
BIOL 290H, Evolution, 3 credit hours, 2 students enrolled, On Campus.
BIOL 830P, Special Topics in Biology, 3 credit hours, 16 students enrolled, Web Based.

Spring 2013

BIOL 106, Biology II, 0 credit hours, 14 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 13 students enrolled, On Campus.
BIOL 290, Evolution, 3 credit hours, 31 students enrolled, On Campus.
BIOL 290H, Evolution, 3 credit hours, 5 students enrolled, On Campus.

Fall 2013

BIOL 290, Evolution, 3 credit hours, 25 students enrolled, On Campus.
BIOL 290H, Evolution, 3 credit hours, 4 students enrolled, On Campus.
BIOL 853, Genome Evolution, 3 credit hours, 25 students enrolled, Web Based.

Spring 2014

BIOL 106, Biology II, 0 credit hours, 15 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 11 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 13 students enrolled, On Campus.
BIOL 290, Evolution, 3 credit hours, 22 students enrolled, On Campus.
BIOL 290H, Evolution, 3 credit hours, 1 students enrolled, On Campus.

Summer 2014

BIOL 830P, Special Topics in Biology, 3 credit hours, 9 students enrolled, Web Based.

Fall 2014

BIOL 290, Evolution, 3 credit hours, On Campus.
BIOL 290H, Evolution, 3 credit hours, On Campus.
BIOL 802, Organic Evolution, 3 credit hours, On Campus.
BIOL 802, Organic Evolution, 3 credit hours, Web Based.
BIOL 802, Organic Evolution, 3 credit hours, Web Based.

Directed Student Learning

"Microbial Contamination of Surfaces Sampled from Pulmonary Rooms at Children's Hospital Colorado.." (August 2014 - Present).
Advised: Joseph McClennan

Master's Thesis Committee Member, Biology. (August 2014 - Present).
Advised: Jennifer Frisch

Supervised Research - UGRD, "TBD." (August 2014 - Present).
Advised: Abby Hongsermeier

Directed Individual, "Presence of Microcystins at Lake Sammamish During Dry and Wet Seasons," Biology. (June 2014 - Present).
Advised: Jerry Saldajeno

Directed Individual, "Effect of Eurasian Watermilfoil (Myriophyllum spicatum) on the length of sunfish species," Biology. (January 2014 - Present).
Advised: Sarah Paquette

Directed Individual, "TBD," Biology. (August 2013 - Present).
Advised: Jessica Korinek

Supervised Research - UGRD, "Intron degeneration in the lichen fungi Teloschistes.," Biology. (August 2013 - Present).
Advised: Jordanna Glock

Directed Individual, "Comparison of grass and sedge populations of the Platte River in Cass County, Nebraska," Biology. (June 2013 - Present).
Advised: Patrick Brommer

Directed Individual, "TBD," Biology. (August 2012 - Present).
Advised: Jacquelyn Smith

Supervised Research - UGRD, "Identification of eastern and western red bats (Lasiurus borealis and Lasiurus blossevillii) by molecular techniques in North America," Biology. (August 2013 - December 2014).
Advised: Brittney Adams

Supervised Research - UGRD, "Distribution of Phragmites australis in Valentine National Wildlife Refuge." (August 2013 - December 2014).
Advised: Grace Woeppel

Directed Individual, "The Effects of Membrane Filter Pour Size on the Enumeration of Yeast in Sugar," Biology. (June 2013 - July 2014).
Advised: Lindsey Bowen

Supervised Research - UGRD, "Intron degeneration in the lichen fungi Teloschistes," Biology. (August 2013 - May 2014).
Advised: Ryan Kleier

Supervised Research - UGRD, "Evolution of rRNA introns in Lecanora," Biology. (August 2013 - May 2014).
Advised: Shanice Harris

Directed Individual, "Comparison of the Rare Genome Sequencing for 16S rRNA of Bacteria across Alkaline Lakes in Northwest Nebraska," Biology. (June 2013 - May 2014).
Advised: Kathryn Krischke

Directed Individual, "Intron degeneration in the lichen fungi Teloschistes," Biology. (August 2012 - May 2014).
Advised: Derek Kleier

Directed Individual, "Effects of Low Concentrations of Disinfectants on E. coli," Biology. (August 2012 - May 2014).
Advised: Eva Aranda

Directed Individual, "Melaleuca quinquenervia and its negative allelopathic effects on seed germination.," Biology. (January 2013 - December 2013).
Advised: Holly Kus

Directed Individual, "Salinity and temperature effects on Prorocentrum minimum cell density in laboratory cultures as a model for seasonal bloom conditions in the Arabian gulf region," Biology. (January 2013 - December 2013).
Advised: Matthew Brim

Directed Individual, "The role of Vitamin E as an antioxidant in survival of Escherichia coli cells exposed to ultraviolet light," Biology. (August 2012 - August 2013).
Advised: Jennifer Davis

Directed Individual, "Evolution of rRNA introns in the lichen Physcia," Biology. (January 2013 - May 2013).
Advised: Kellie Hansen

Directed Individual, "Fungal diversity of a cottonwood root system.," Biology. (August 2009 - May 2013).
Advised: Jeff Shaw

Directed Individual, "Search for Geomyces destructans in Nebraska," Biology. (August 2012 - December 2012).
Advised: Tyson Lynn

Directed Individual, "Identification of a North American Mayapple (Podophyllum peltatum) downy mildew," Biology. (August 2011 - December 2012).
Advised: Marie Clark

Directed Individual, "Effectiveness of a Peracetic Acid Wash Versus a Lactic Acid Wash on Hog Carcasses after Slaughter," Biology. (January 2012 - August 2012).
Advised: Benjamin Stellmacher

Directed Individual, "Splicing of small insertion in lichen rRNA," Biology. (January 2012 - May 2012).
Advised: Heather Harris

Directed Individual, "The effect of acaricide tick population control methods on the rate of detected human pathogens in Ixodes scapularis in Barnstable County, Massachusetts," Biology. (August 2011 - May 2012).
Advised: Kimberly Maurer

Directed Individual, "Multi-step Resistance Selection of a New Pleuromutilin, PLEU1, Compared to Three Prominent Antibiotics in Use for Staphylococcus aureus," Biology. (June 2011 - May 2012).
Advised: Dianne Hoellman

Directed Individual, "Comparison Of Native Plants For Removal Of Escherichia Coli From The San Jacinto River," Biology. (June 2011 - May 2012).
Advised: Julana Williams

Directed Individual, "The Effect of Enrichments on the Microbial Diversity of the Lakes in the Sandhills Region of Nebraska," Biology. (August 2010 - May 2012).
Advised: Julie McLaughlin

Directed Individual, "Degeneration of a plastid group II intron.," Biology. (June 2010 - May 2012).
Advised: Jaicee Post

Directed Individual, "Sex Differences in gastrointestinal bacterial species diversity of the Anole in Saint Barthélemy, French West Indies," Biology. (August 2009 - May 2012).
Advised: Stephanie Doucette

Directed Individual, "Evolution of rRNA introns in fungi," Biology. (June 2009 - May 2012).
Advised: Travis Kirchner

Independent Study, Biology. (August 2011 - December 2011).
Advised: Monluedee Luecha

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Ethan Cordes

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Monluedee Luecha

Directed Individual, "Effects of Soil Nitrogen Levels on Fungal Abundance in an Urban Ecological Reserve," Biology. (August 2010 - August 2011).
Advised: Sara English

Directed Individual, "Fungal Diversity in a Cottonwood Root System," Biology. (August 2010 - May 2011).
Advised: Lance Wilson

Directed Individual, "The Genetic Diversity of Pueblo Blue Corn Landraces," Biology. (August 2010 - May 2011).
Advised: William Becker

Independent Study, "Microbial Diversity in Alkaline Lakes," Biology. (August 2010 - May 2011).
Advised: Eric Steelman

Directed Individual, "Production and characterization of acasin: a defensin protein from Ajellomyces capsulatus with potential antimicrobial therapeutic properties.," Biology. (June 2010 - December 2010).
Advised: Jason Haineault

Directed Individual, "Evolutionary pattern of the psaA red algal group II intron," Biology. (January 2010 - December 2010).
Advised: Whitney Prokupek

Directed Individual, "Hydroxytyrosol acetate: A potent chemopreventive agent against human HeLa cells in vitro," Biology. (May 2009 - December 2010).
Advised: Dawn Fuelberth

Master's Thesis Committee Member. (2009 - 2010).
Advised: Rick Callahan

Directed Individual, "Secondary structure degeneration of a red algal group II intron," Biology. (January 2010 - May 2010).
Advised: Alicia Virgl

Scholarship

Intellectual Contributions

Duncan, G., Grandgenett, N., McClung, W., Reichart, L. M., Simon, D. M., Tapprich, W., Pauley, M. (2015). *Laboratories for Integrating Bioinformatics into the Life Sciences* (vol. 36). Tested Studies for Laboratory Teaching: Proceedings of ABLE.

McNeil, B. A., Simon, D. M., Zimmerly, S. (2014). Alternative splicing of a group II intron in a surface layer protein gene in Clostridium tetani. *Nucleic Acids Research, 42*(3), 1959-69.

Yeh, P. J., Simon, D. M., Miller, J. A., Alexander, H. F., Franklin, D. (2011). A diversity of antibiotic-resistant Staphylococcus spp. in a public transportation system. *Public Health and Research Perspectives, 2*(3), 202-209.

Harner, M. J., Nelson, A. J., Geluso, K., Simon, D. M. (2011). Chytrid fungus in American bullfrogs (Lithobates catesbeianus) along the Platte River, Nebraska, USA. *Herpetological Review, 42*, 549-551.

Tam, P. P., Barrette-Ng, I. H., Simon, D. M., Tam, M. W., Ang, A. L., Muench, D. G. (2010). The Puf family of RNA-binding proteins in plants: phylogeny, structural modeling, activity and subcellular localization. *BMC Plant Biology, 10*, 44.

Presentations

Pauley, M. (Author & Presenter), Simon, D. M. (Author & Presenter), Duncan, G. (Author & Presenter). Association for Biology Laboratory Education (ABLE) Conference, "Laboratories for integrating bioinformatics into the life sciences," Association for Biology Laboratory Education (ABLE), Eugene, OR. (June 18, 2014).

Harris, S. (Author & Presenter), Simon, D. M. (Author). Nebraska Academy of Sciences Annual Meeting, "Evolutionary history of rRNA introns in Lecanora spp.," Nebraska Academy of Sciences, Lincoln, NE. (April 11, 2014).

Kleier, D. (Author & Presenter), Simon, D. M. (Author), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). Nebraska Academy of Sciences Annual Meeting, "Intron degeneration in the lichen fungi Teloschistes.," Nebraska Academy of Sciences, Lincoln, NE. (April 11, 2014).

Kleier, D. (Author & Presenter), Simon, D. M. (Author), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). National Conference on Undergraduate Research, "Intron degeneration in the lichen fungi Teloschistes.," Council on Undergraduate Research, Lexington, KY. (April 3, 2014).

Shaffer, J. J. (Author & Presenter), White, B. (Author), Simon, D. M. (Author). 113th General Meeting of the American Society of Microbiology, "Comparison of microbial diversity in a potash and freshwater lake in the sandhills region of Nebraska," Denver, CO. (2013).

Shaffer, J. J. (Author & Presenter), White, B. (Author), Simon, D. M. (Author). 12th Annual NE-INBRE Conference, "Comparison of microbial diversity in a potash and freshwater lake in the Sandhills region of Nebraska," NE-INBRE, Grand Island, NE. (August 2013).

Simon, D. M. (Author & Presenter), Kleier, D. (Author), Miadlikowska, J. (Author), Gaya, E. (Author), Hartmann, S. (Author), Lutzoni, F. (Author). 12th Annual NE-INBRE Conference, "Intron degeneration in fungal rRNA," NE-INBRE, Grand Island, NE. (August 2013).

Kleier, D. (Author & Presenter), Simon, D. M. (Author), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). 12th Annual NE-INBRE Conference, "Intron degeneration in the lichen fungi Teloschistes.," NE-INBRE, Grand Island, NE. (August 2013).

Kleier, D. (Author & Presenter), Simon, D. M. (Author & Presenter), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). Annual Meeting of the Society for Molecular Biology and Evolution, "Intron degeneration in fungal rRNA," Society for Molecular Biology and Evolution, Chicago, IL. (July 2013).

Shaw, J. (Author & Presenter), Harner, M. J. (Author), Simon, D. M. (Author). Nebraska Academy of Sciences Annual Meeting, "Fungal diversity of a cottonwood root system.," Nebraska Academy of Sciences, Lincoln, NE. (April 19, 2013).

Kleier, D. (Author & Presenter), Simon, D. M. (Author), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). Nebraska Academy of Sciences Annual Meeting, "Intron degeneration in the lichen fungi Teloschistes.," Nebraska Academy of Sciences, Lincoln, NE. (April 19, 2013).

Shaw, J. (Author & Presenter), Harner, M. J. (Author), Simon, D. M. (Author). Annual Meeting of the American Society of Microbiology Missouri Valley Branch, "Fungal diversity of a cottonwood root system.," Nebraska Academy of Sciences, Tulsa, OK. (March 2013).

McNeil, B. A. (Author & Presenter), Simon, D. M. (Author), Zimmerly, S. (Author). Annual Meeting of the RNA Society, "Alternative splicing of a group II intron in Clostridium tetani.," RNA Society, Madison, WI. (2012).

McNeil, B. A. (Author & Presenter), Simon, D. M. (Author), Zimmerly, S. (Author). RiboWest Conference, "Alternative splicing of a group II intron in Clostridium tetani.," RiboWest, Lethbridge, AB; Canada. (2012).

Shaw, J. (Author & Presenter), Harner, M. J. (Author), Simon, D. M. (Author). Crane Trust Research Symposium, "Fungal diversity of a cottonwood root system.," Crane Trust, Wood River, NE. (October 2012).

Simon, D. M. (Author & Presenter), Kirchner, T. (Author & Presenter), Miadlikowska, J. (Author), Gaya, E. (Author), Lutzoni, F. (Author). 11th Annual NE-INBRE Conference, "Evolution of rRNA introns in fungi," NE-INBRE, Grand Island, NE. (August 2012).

Shaw, J. (Author & Presenter), Harner, M. J. (Author), Simon, D. M. (Author). 11th Annual NE-INBRE Conference, "Fungal diversity of a cottonwood root system.," NE-INBRE, Grand Island, NE. (August 2012).

Post, J. (Author & Presenter), Simon, D. M. (Author). Nebraska Academy of Sciences Annual Meeting, "Degeneration of an ancient red algal plastid group II intron," Nebraska Academy of Sciences, Lincoln, NE. (April 2012).

Post, J. (Author & Presenter), Simon, D. M. (Author). National Conference on Undergraduate Research, "Degeneration of an ancient red algal plastid group II intron," Council on Undergraduate Research, Ogden, UT. (March 2012).

Shaw, J. (Author & Presenter), Harner, M. J., Simon, D. M. (Author). National Conference on Undergraduate Research, "Fungal diversity of a cottonwood root system," Council on Undergraduate Research, Ogden, UT. (March 2012).

Post, J. (Author & Presenter), Yoon, H. S. (Author), West, J. A. (Author), Bhattacharya, D. (Author), Simon, D. M. (Author). 10th Annual NE-INBRE Conference, "Degeneration of an ancient red algal plastid group II intron," NE-INBRE, Grand Island, NE. (August 2011).

Shaw, J. (Author & Presenter), Wilson, L. (Author), Harner, M. J. (Author), Simon, D. M. (Author). 10th Annual NE-INBRE Conference, "Fungal diversity of a cottonwood root system," NE-INBRE, Grand Island, NE. (August 2011).

Post, J. (Author & Presenter), Yoon, H. S. (Author), West, J. A. (Author), Bhattacharya, D. (Author), Simon, D. M. (Author). Joint Meeting of the Societies for the Study of Evolution, Systematic Biogy, and American Society of Naturalists, "Degeneration of an ancient red algal plastid group II intron," Nebraska Academy of Sciences, Norman, OK. (June 2011).

Shaw, J. (Author & Presenter), Wilson, L. (Author), Harner, M. J. (Author), Simon, D. M. (Author). Joint Meeting of the Societies for the Study of Evolution, Systematic Biogy, and American Society of Naturalists, "Fungal diversity of a cottonwood root system," Nebraska Academy of Sciences, Norman, OK. (June 2011).

Steelman, E. (Author & Presenter), Shaffer, J. J. (Author), Plantz, B. (Author), Simon, D. M. (Author). Joint Meeting of the Societies for the Study of Evolution, Systematic Biogy, and American Society of Naturalists, "Microbial composition of the Nebraska Sandhills alkaline lake ecosystem," Nebraska Academy of Sciences, Norman, OK. (June 2011).

Kirchner, T. (Author & Presenter), Gaya, E. (Author), Miadlikowska, J. (Author), Lutzoni, F. (Author), Simon, D. M. (Author). Central Regional IDeA Conference, "Characterization of rRNA introns in fungi," Central Regional IDeA Network (NIH), Grand Island, NE. (May 2011).

Simon, D. M. (Author & Presenter), Post, J. (Author). Central Regional IDeA Conference, "Degeneration of a plastid group II intron.," Central Regional IDeA Network (NIH), Omaha, NE. (May 2011).

Shaw, J. (Author & Presenter), Harner, M. J. (Author), Simon, D. M. (Author). Central Regional IDeA Conference, "Fungal diversity of a cottonwood root system," Central Regional IDeA Network (NIH), Grand Island, NE. (May 2011).

Carlson, D. J. (Author & Presenter), Cordes, E. (Author), Stoner, C. (Author), Ericson, B. L. (Author), Simon, D. M. (Author), Carlson, K. A. (Author). 52nd Annual Drosophila Research Conference, "Evolution of Nora Virus sequence between Swedish and United States populations of Drosophila melanogaster," San Diego, CA. (April 2011).

Kirchner, T. (Author & Presenter), Gaya, E. (Author), Miadlikowska, J. (Author), Lutzoni, F. (Author), Simon, D. M. (Author). Nebraska Academy of Sciences Annual Meeting, "Characterization of rRNA introns in fungi," Nebraska Academy of Sciences, Lincoln, NE. (April 2011).

Shaw, J. (Author & Presenter), Wilson, L. (Author), Harner, M. J., Simon, D. M. (Author). Nebraska Academy of Sciences Annual Meeting, "Fungal diversity of a cottonwood root system," Nebraska Academy of Sciences, Lincoln, NE. (April 2011).

Tam, P. P. (Author & Presenter), Barrette-Ng, I. H. (Author), Simon, D. M. (Author), Tam, M. W. (Author), Ang, A. L. (Author), Muench, D. G. (Author). Meeting of the American Society of Plant Biologists, "The Puf family of RNA-binding proteins in plants: phylogeny, structural modeling, activity and subcellular localization," American Society of Plant Biologists, Montreal, Quebec; Canada. (2010).

Post, J. (Author & Presenter), Simon, D. M. (Author). 9th Annual NE-INBRE Conference, "Degeneration of a plastid group II intron.," NE-INBRE, Grand Island, NE. (August 2010).

Cecrle, J. (Author & Presenter), James, K. (Author & Presenter), Shaw, J. (Author), Harner, M. J. (Author), Simon, D. M. (Author). 9th Annual NE-INBRE Conference, "Fungal diversity of a cottonwood root system," NE-INBRE, Grand Island, NE. (August 2010).

Klein, B. (Author & Presenter), Stoner, C. (Author), Cordes, E. (Author), Carlson, D. J. (Author), Ericson, B. L. (Author), Simon, D. M. (Author), Carlson, K. A. (Author). 9th Annual NE-INBRE Meeting, "Evolution of nora virus sequence between Swedish and United States populations of Drosophila melanogaster," Grand Island, NE. (August 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Currently Under Review

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), "Nebraska Training Network and Functional Genomics", Project Title: "Bridge Funding"," Grant, Sponsored by

INBRE Program of the National Center for Research Resources/NIH, Federal, $2,344,723.00. (August 2014 - August 2015).

Funded

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), "Supplement to INBRE Grant – Summer Bridge Funding from UNMC to support INBRE Scholars," Grant, Sponsored by UNMC, State, $8,900.00. (July 2014 - September 2014).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), Reichart, L. M. (Co-Principal), Bourret, T. J. (Co-Principal), Panaitof, S. C. (Co-Principal), "Nebraska Training Network and Functional Genomics," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $1,275,620.00. (April 2009 - March 2014).

Simon, D. M. (Principal), "Evolution of rRNA introns in fungi," Grant, Sponsored by NE-EPSCoR, State, $20,000.00. (April 1, 2012 - April 1, 2013).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), ""Administrative Supplement Notice for Students and Science Educators under the Recovery Act", Project Title: "Nebraska Training Network and Functional Genomics",," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $142,516.00. (July 2009 - September 2011).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Simon, D. M. (Co-Principal), Shaffer, J. J. (Co-Principal), "Supplement to INBRE Grant Renewal Year 1: Purchase of multiple pieces of equipment," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $54,838.00. (2010).

Service

Professional Memberships

Association for Biology Laboratory Education. (June 2014 - Present).

Sigma Xi, The Scientific Research Society. (2009 - Present).

Society for Molecular Biology and Evolution. (2009 - Present).

Society of Systematic Biologists. (2009 - 2012).

Academic Advising

Master's Thesis Committee Member, Biology. (August 2014 - Present).
Advised: Jennifer Frisch

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Ethan Cordes

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Monluedee Luecha

Master's Thesis Committee Member. (2009 - 2010).
Advised: Rick Callahan

2011-2012

Undergraduate Students Advised: 30

2012-2013

Undergraduate Students Advised: 30

2013-2014

Undergraduate Students Advised: 35

2014-2015

Undergraduate Students Advised: 24

Service – Department

Committee Chair, Search Committee Public Health tenure-track position. (September 2014 - Present).

Faculty Mentor. (2013 - Present).

Adams High School (Hastings) Students Departmental Visit. (2012 - Present).

Ogallala High School Students Departmental Visit. (2012 - Present).

Departmental Tours. (2011 - Present).

Committee Chair, Assessment. (August 2009 - Present).

Committee Member, Oversight Committee. (2010 - 2013).

Committee Member, Search Committee Anatomy & Physiology tenure-track position. (January 2012 - May 2012).

Committee Member, Search Committee Distance tenure-track position. (August 2010 - December 2010).

Committee Chair, Graduate Student Handbook. (January 2010 - August 2010).

Service – College

Committee Member, Advisory Committee. (August 2014 - May 2017).

Committee Member, Faculty Peer Review - Physics. (January 2015 - May 2015).

College Mentor, Critical Thinking Initiative. (May 2013 - May 2014).

Service – University

Committee Member, Faculty Senate Artists & Lecturers Committee. (October 2013 - Present).

Presenter, Health Careers Fair. (October 8, 2014).

Committee Member, Faculty Senate Library Committee. (February 2014 - September 2014).

Presenter, Health Careers Fair. (October 9, 2013).

Service – Professional

Reviewer, Conference Paper, International Conference on Computational Science. (2012 - Present).

Reviewer, Journal Article, Molecular Biology and Evolution. (2012 - Present).

Reviewer, Journal Article, PLoS One. (2012 - Present).

Reviewer, Journal Article, Fungal Biology. (2010 - Present).

Reviewer, Textbook, The Tangled Bank: An Introduction to Evolution by Carl Zimmer (Roberts Publishing). (2010 - Present).

Service – Public

Science Fair judge. (2012).

Program Organizer, NESCent Darwin Day. (September 2010 - February 2011).

Science Fair judge. (2010).

Other

Faculty Development Activities Attended

Day long formal informational visit to UNMC College of Public Health, "University of Nebraska Medical Center (UNMC) Public Health Early Admissions Student Track (PHEAST) Visit," University of Nebraska Medical Center (UNMC) College of Public Health, Omaha, NE, State. (September 29, 2014).

Workshop, "Critical Thinking Initiative Workshop," UNK Center for Teaching Excellence, Kearney, NE, Local. (May 16, 2013 - May 17, 2013).

Workshop, "Curriculum Mapping Training," UNK Assessment Office, Kearney, NE, Local. (May 2011 - August 2012).

Workshop, "Faculty Online Training Course," UNK eCampus, Kearney, NE, Local. (September 2010 - November 2010).

Dr. Julie J. Shaffer
Biology
(308) 865-8661
Email: shafferjj@unk.edu

Academic Degrees

PhD, University of Nebraska-Lincoln, 1999.

Major: Biology

Supporting Areas of Emphasis: Microbial physiology

Dissertation Title: Characterization of a novel DNA repair phenotype in Pseudomonas aeruginosa bacteriophage UNL-1

BS, Sioux Falls College, 1994.

Major: Biology and English

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 23, 1999

Date Attained Rank of Assistant Professor: August 16, 1999

Date Attained Rank of Associate Professor: August 16, 2004

Date Attained Rank of Full Professor: August 16, 2010

Awards and Honors

Leland Holdt/Security Mutual Life Insurance Company Distinguished Faculty Award, University. (December 19, 2014).

Recognition for exemplary service and leadership, Missouri-Valley Branch of the American Society of Microbiology, Leadership. (2013).

Silver Leadership Award, Community Health Charities of Nebraska, Service, Community, State. (2013).

MGAN Travel Award, Department of Energy (DOE) Joint Genome Institute (JGI), Teaching, Regional. (2012).

University Departmental Teaching Award, UNK, Teaching, University. (2012).

Pratt-Heins Foundation Faculty Award, UNK, Teaching, University. (2010).

Teaching

Scheduled Teaching

Fall 2010

BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 20 students enrolled, On Campus.

BIOL 430, Special Topic In Biology, 3 credit hours, 1 students enrolled, On Campus.

BIOL 830P, Spec Topics In Biology, 1 credit hours, 25 students enrolled, Web Based.

BIOL 840, Infectious Diseases, 3 credit hours, 27 students enrolled, Web Based.

Spring 2011

BIOL 211, Human Microbio, 4 credit hours, 102 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 23 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 19 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 20 students enrolled, On Campus.
BIOL 211, Human Microbio, 0 credit hours, 19 students enrolled, On Campus.
BIOL 400, Microbiology, 4 credit hours, 7 students enrolled, On Campus.
BIOL 400, Microbiology, 0 credit hours, 8 students enrolled, On Campus.
BIOL 800P, Microbiology, 4 credit hours, 1 students enrolled, On Campus.
BIOL 800P, Microbiology, 0 credit hours, 1 students enrolled, On Campus.

Summer 2011
BIOL 840, Infectious Diseases, 3 credit hours, 25 students enrolled, Web Based.

Fall 2011
BIOL 430, Special Topics in Biology, 3 credit hours, 2 students enrolled, Web Based.
BIOL 440, Infectious Diseases, 4 credit hours, 11 students enrolled, On Campus.
BIOL 440, Infectious Diseases, 0 credit hours, 11 students enrolled, On Campus.
BIOL 840, Infectious Diseases, 3 credit hours, 28 students enrolled, Web Based.
BIOL 840P, Infectious Diseases, 4 credit hours, 1 students enrolled, On Campus.
BIOL 840P, Infectious Diseases, 0 credit hours, 1 students enrolled, On Campus.

Spring 2012
BIOL 400, Microbiology, 4 credit hours, 7 students enrolled, On Campus.
BIOL 400, Microbiology, 0 credit hours, 7 students enrolled, On Campus.
BIOL 400H, Microbiology, 4 credit hours, 4 students enrolled, On Campus.
BIOL 400H, Microbiology, 0 credit hours, 4 students enrolled, On Campus.
BIOL 812, Microbial Diversity, 3 credit hours, 27 students enrolled, Web Based.

Summer 2012
BIOL 211, Human Microbio, 4 credit hours, 19 students enrolled, On Campus.
BIOL 211, Human Microbio, 0 credit hours, 19 students enrolled, On Campus.

Fall 2012
BIOL 830P, Special Topics in Biology, 2 credit hours, 25 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 2 credit hours, 15 students enrolled, Web Based.
BIOL 840, Infectious Diseases, 3 credit hours, 25 students enrolled, Web Based.

Spring 2013
BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 804, Evolution of Epidemics, 3 credit hours, 27 students enrolled, Web Based.

Fall 2013
BIOL 211, Human Microbio, 0 credit hours, 20 students enrolled, On Campus.
BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 21 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 19 students enrolled, On Campus.

BIOL 440, Infectious Diseases, 4 credit hours, 19 students enrolled, On Campus.

BIOL 440, Infectious Diseases, 0 credit hours, 19 students enrolled, On Campus.

BIOL 440H, Infectious Diseases, 4 credit hours, 2 students enrolled, On Campus.

BIOL 440H, Infectious Diseases, 0 credit hours, 2 students enrolled, On Campus.

BIOL 840, Infectious Diseases, 3 credit hours, 25 students enrolled, Web Based.

BIOL 840P, Infectious Diseases, 4 credit hours, 3 students enrolled, On Campus.

BIOL 840P, Infectious Diseases, 0 credit hours, 3 students enrolled, On Campus.

Spring 2014

BIOL 211, Human Microbio, 0 credit hours, 22 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 22 students enrolled, On Campus.

BIOL 812, Microbial Diversity, 3 credit hours, 19 students enrolled, Web Based.

BIOL 840, Infectious Diseases, 3 credit hours, 19 students enrolled, Web Based.

Fall 2014

BIOL 440, Infectious Diseases, 4 credit hours, On Campus.

BIOL 440, Infectious Diseases, 0 credit hours, On Campus.

BIOL 440H, Infectious Diseases, 4 credit hours, On Campus.

BIOL 440H, Infectious Diseases, 0 credit hours, On Campus.

BIOL 840, Infectious Diseases, 3 credit hours, Web Based.

BIOL 840, Infectious Diseases, 3 credit hours, Web Based.

Directed Student Learning

Master's Thesis Committee Chair, Biology. (August 2014 - Present).
Advised: Tashia Anderson

Supervised Research - GRAD, Biology. (May 2014 - Present).
Advised: Deron Anderson

Supervised Research - GRAD, Biology. (May 2014 - Present).
Advised: Elizabeth Hodges

Supervised Research - GRAD, Biology. (May 2014 - Present).
Advised: Laura Molyneux

Supervised Research - GRAD, "Antibiotic resistant Escherichia coli along Bear Creek." (January 2014 - Present).
Advised: Corrie Kezer

Supervised Research - GRAD, "The effects of vitamins of rotifer reproduction." (January 2014 - Present).
Advised: Miranda Ostrowski

Supervised Research - GRAD, "The Jubilee effect in Mobile Bay." (January 2014 - Present).
Advised: Timothy Tisdale

Supervised Research - GRAD, "Temperature effects of coliforms in standing water on farms in Shelby County, AL." (August 2013 - Present).
Advised: Brittany Knight

Supervised Research - UGRD, "Quantification of siderophores from bacteria isolated from alkaline lakes." (August 2013 - Present).
Advised: Estrella Monrroy

Supervised Research - GRAD, "Abiotic water analysis of I-80 lakes." (May 2013 - Present).
Advised: Rebecca Pawlak

Master's Thesis Committee Member. (August 2012 - Present).
Advised: Li Wang

Supervised Research - GRAD, "The Effect of Zuprevo (Tildipirosin), a Macrolide Antibiotic, on Bighorn Sheep Lamb Survival During a Bacterial Pneumonia Epizootic," Biology. (January 2013 - May 2014).
Advised: Laura Woodrum

Master's Thesis Committee Member, Biology. (August 2012 - May 2014).
Advised: Adrienne Conley

Master's Thesis Committee Member, Biology. (August 2012 - May 2014).
Advised: Kellie Licking

Supervised Research - GRAD, "Determining bacterial population on esthetic restorations subjected to prophylaxis and the effect of an electric toothbrush on cariogenic bacterial populations," Biology. (January 2013 - December 2013).
Advised: Amy Stewart

Supervised Research - GRAD, "Effects of garlic mustard on soil invertebrates," Biology. (August 2012 - December 2013).
Advised: Julie Kilbride

Supervised Research - UGRD, "Alakline-saline Lake Microbial Diversity," Biology. (May 2012 - December 2013).
Advised: Kendra Harbison

Supervised Research - GRAD, "Effects of Golf Course Fertilizer Usage on Water Quality," Biology. (January 2012 - December 2013).
Advised: Blair Smith-Ries

SSRP--High school student, "Quantification of nitrogen and phorsphorus in sand pit lakes." (May 2013 - July 2013).
Advised: Ashlie Monte

SSRP--High school teacher, "Quantification of nitrogen and phorsphorus in sand pit lakes." (May 2013 - July 2013).
Advised: Kandra Auwerda

Supervised Research - UGRD, "Microbial Diversity from lakes in Sheridan County compared to Garden County," Biology. (August 2012 - July 2013).
Advised: Parth Chaudhari

Supervised Research - GRAD, "Effects of the addition of D-tyrosine to honey on antimicrobial effectiveness against Pseudomonas aeruginosa," Biology. (May 2012 - July 2013).
Advised: Ashley Cunninhgam

Supervised Research - GRAD, "The Antimicrobial Potential of Salivary Glands in Blatella germanica," Biology. (May 2011 - July 2013).
Advised: Melanie Briscoe

Supervised Research - UGRD, "A Phylogenetic Analysis of Bacteria in Western Nebraska Alkaline-Saline Lakes Using an Afex Pretreated Cellulose Enrichment," Biology. (August 2012 - May 2013).
Advised: Kevin Ripp

Supervised Research - UGRD, "How effective are Clean Wave UV-C Portable Toothbrush Sani-tizers in removing Streptococcus mitis from toothbrushes?," Foreign Language. (August 2012 - May 2013).
Advised: Rafaila Ramirez

Supervised Research - UGRD, "Identification of Siderophore Producing Bacteria from Alkaline-Saline Lakes," Biology. (August 2012 - May 2013).
Advised: Tyler Lee

Supervised Research - GRAD, "Addition of Myxobacteria to Increase Cell Wall Degraders to Lyse Arthrobacter," Biology. (May 2012 - May 2013).
Advised: Simon Wahla

Supervised Research - GRAD, "Thermodynamic Protein Stabilization and Determination Using Rf Factor of Thin Layer Chromatography for Renatured Protein Resolution of Kombucha," Biology. (August 2011 - May 2013).
Advised: Kathryn Krischke

Supervised Research - GRAD, "Does Repeat Exposure to Triclosan Induce Antimicrobial Resistance in Bacteria Found on a Community Setting," Biology. (January 2009 - May 2013).
Advised: Bich Tran

Master's Thesis Committee Member, Biology. (December 2012).
Advised: Seth Lundgren

Supervised Research - GRAD, "Effectiveness of Lomatium dissectum in treating Staphylococcus aureus infection in silkworms," Biology. (January 2012 - December 2012).
Advised: Aaron Collins

Supervised Research - UGRD, "Seasonal Variation in Bacterial Populations in the Potash Lakes of Western Nebraska," Biology. (August 2011 - December 2012).
Advised: Ben White

Supervised Research - UGRD, "Do UV sanitizers really make your toothbrush safer?," Biology. (August 2011 - December 2012).
Advised: Hiroaki Ito

Supervised Research - GRAD, "The Prevalence of Escherichia coli in Soil Following Seasonal Flooding of the Missouri River," Biology. (May 2011 - July 2012).
Advised: Clarissa Shearer

Supervised Research - GRAD, "Biofilms on braces: Influence of bracket material on biofilm development," Biology. (May 2011 - July 2012).
Advised: Penni Beitzel

Master's Thesis Committee Member, Biology. (May 2012).
Advised: Ethan Cordes

Supervised Research - UGRD, "The Optimal pH Level for Carbon Degradation by Isolates Collected from Western Nebraska Alkaline Lakes," Biology. (January 2012 - May 2012).
Advised: Lana LaBore

Supervised Research - UGRD, "Analysis of Siderophore Production in Western Nebraska Alkaline Lakes Using TLC," Biology. (August 2011 - May 2012).
Advised: Toure Laukon

Supervised Research - UGRD, "Beetle Juice! A Search for Antimicrobial Proteins in Nicrophorus Marginatus Saliva," Biology. (August 2011 - May 2012).
Advised: Travis Claybrooks

Supervised Research - GRAD, "Microbial biomass and community structure as an indicator of soil health under various cover and companion crops," Biology. (May 2011 - May 2012).
Advised: Lance Gunderson

Supervised Research - GRAD, "Bacterial Count Comparisons of Enterococci in Surface Water and Potential Impacts on Health," Biology. (August 2010 - May 2012).
Advised: Gretchen Clevenger

Supervised Research - UGRD, "Creating a Laboratory Activity in which Students will Learn about the Role of Persister Cells in Aantibiotic Rresistance," Biology. (May 2011 - December 2011).
Advised: Danielle Mowinkle

Supervised Research - GRAD, "Influence of selective agar on fluconazole Etest minimum inhibitory concentration for Candida spp.," Biology. (August 2010 - December 2011).
Advised: Casey Schroeder

Supervised Research - GRAD, "Streptococcus mutans and Lactobacillus detection in the assessment of dental decay," Biology. (August 2010 - December 2011).
Advised: Diana Romero

Supervised Research - GRAD, "Potential transmission of Helicobacter pylori from vegetables to humans," Biology. (August 2010 - December 2011).
Advised: Jason Moir

Master's Thesis Committee Member, Business Administration. (July 2011).
Advised: Martha Montanez

Master's Thesis Committee Member, Biology. (July 2011).
Advised: Shelly McPherron

Directed Individual, "Euthanasia paper." (May 2011 - July 2011).
Advised: Deysy Zamora

Supervised Research - UGRD, "Effects of Calcium, Potassium and Sodium Cations on Bacteriophage Infectivity Obtained from the Western Sandhills Hypersaline Lakes of Nebraska," Biology. (January 2011 - July 2011).
Advised: Cory Shield

Supervised Research - GRAD, "Currency as a Potential Transmitter of Methicillin-Resistant Staphylococcus Aureus," Biology. (May 2010 - July 2011).
Advised: Amanda Fields

Supervised Research - GRAD, "Analysis of turnaround times for identification of Acinetobacter species at a Baltimore, Maryland hospital using the Remel™ RapID NF Plus Panel and MicroScan© Rapid Neg ID Panels," Biology. (May 2010 - July 2011).
Advised: Tonia Lowe

Supervised Research - UGRD, "Characterization of Siderophores from Bacteria in Hyper Alkaline-Saline Lakes," Biology. (August 2009 - July 2011).
Advised: Marcelle Strydom

Scholarship

Intellectual Contributions

Shaffer, J. J., Carlson, D. J., Simonson, R. L. (2012). *Introductory Microbiology* (2nd edition ed., pp. 1-79). Foster City, CA: Cafepress.com.

Smith, M. J., Shaffer, J. J., Koupal, K. D., Hoback, W. W. (2012). Laboratory measures of filtration by freshwater mussels: an activity to introduce biology students to an increasingly threatened group of organisms. *Bioscene, 38*(2), 10-15.

Presentations

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). 74th Annual Midwest Fish and Wildlife Conference, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kansas City, MO. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). Joint Meeting of Nebraska and Iowa Chapters of the American Fisheries Society, "Characterizing the abiotic and biotic components of Nebraska I-80 lakes: implications for growth of stocked fish," Council Bluffs, IA. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). UNK Student Research Day, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kearney, NE. (2014).

McHale, L. A. (Author & Presenter), Nordeen, T., Shaffer, J. J., Peterson, B. C. Northern Wild Sheep and Goat Council, "The effect of Zeprevo, a macrolide antibiotic, on bighorn lamb survival following a bacterial pneumonia outbreak," Fort Collins, CO. (June 2014).

Shaffer, J. J. (Author & Presenter), White, B. (Author), Simon, D. M. (Author). 113th General Meeting of the American Society of Microbiology, "Comparison of microbial diversity in a potash and freshwater lake in the sandhills region of Nebraska," Denver, CO. (2013).

Ripp, K. (Author & Presenter), Shaffer, J. J. (Author). Annual Meeting of the Missouri Valley Branch of the American Society of Microbiology, "A phylogenetic analysis of bacteria in western Nebraska alkaline-saline lakes using an Afex pretreated cellulose enrichment," Tulsa, OK. (2013).

Lee, T. (Author & Presenter), Shaffer, J. J. (Author). Annual Meeting of the Missouri Valley Branch of the American Society of Microbiology, "Identification of siderophore producing bacteria from alkaline-saline lakes," Tulsa, OK. (2013).

Harbison, K. J. (Author & Presenter), Shaffer, J. J. (Author). National Conference on Undergraduate Research, "Bacterial isolates of Kokjohn pond in the western Nebraska Sandhills," LaCrosse, WI. (2013).

Chaudhari, P. (Author & Presenter), Shaffer, J. J. (Author). Rural Futures Conference, "Microbial diversity in high alkaline-saline lakes present in Sheridan County and Garden County," Lincoln, NE. (2013).

Shaffer, J. J. (Author & Presenter), White, B. (Author), Simon, D. M. (Author). 12th Annual NE-INBRE Conference, "Comparison of microbial diversity in a potash and freshwater lake in the Sandhills region of Nebraska," NE-INBRE, Grand Island, NE. (August 2013).

White, B. M. (Author & Presenter), Shaffer, J. J. (Author). Annual Meeting of the Missouri Valley Branch of the American Society of Microbiology, "Characterization of red pigmented bacteria from potash lakes in the Nebraska Sandhills," Manhattan, KS. (2012).

Harbison, K. J. (Author & Presenter), Shaffer, J. J. (Author). Eleventh Annual Fall Student Research Symposium, "Bacterial isolates of Kokjohn pond in western Nebraska Sandhills," Kearney, NE. (2012).

Bartle, J. (Panelist), Rice, M. (Panelist), Shaffer, J. J. (Panelist). Graduate College Workshop, "Institutionally adapting to the new graduate student," University of Nebraska, Omaha, NE. (2012).

White, B. M. (Author & Presenter), Shaffer, J. J. (Author). INBRE 11th Annual Meeting, "Characterization of red pigmented bacteria from potash lakes in the Nebraska Sandhills," Grand Island, NE. (2012).

Shaffer, J. J. (Author & Presenter), Thapa, I. (Author), Bastola, D. (Author). INBRE 11th Annual Meeting, "Identification of siderophores from short read genome assembly sequence data," Grand Island, NE. (2012).

Fritson, K. K. (Panelist), Hayes, S. K. (Panelist), Luscher, R. M. (Panelist), Moore, T. J. (Panelist), Schulz, S. A. (Panelist), Shaffer, J. J. (Panelist). National Mountain Plains Management Conference, "General Education: advantage for business students? Creative methods to promote integrative thinking," Kearney, NE. (2012).

White, B. M. (Author & Presenter), Shaffer, J. J. (Author). Nebraska Academy of Science, "Characterization of red pigmented bacteria from potash lakes in the Nebraska sandhills," Lincoln, NE. (2012).

Fields, A. B. (Author & Presenter), Tillinghast, H. S. (Author), Shaffer, J. J. (Author). Annual Meeting of the Kansas Academy of Science, "Currency as a potential vector of Staphylococcus aureus," Baldwin City, KS. (2011).

Scott, M. (Author), Shaffer, J. J. (Author & Presenter), Strydom, M. (Author). Central Region IDeA Conference, "Siderophore isolation and characterization from hyper alkaline-saline lakes," Omaha, NE. (2011).

Strydom, M. (Author & Presenter), Scott, M. (Author), Shaffer, J. J. (Author). National Conference on Undergraduate Research, "Siderophore production by alkaline-saline lake bacteria," Ithaca, NY. (2011).

Strydom, M. (Author & Presenter), Shaffer, J. J. (Author). Nebraska Academy of Science, "Siderophore production by alkaline-saline lake bacteria," Lincoln, NE. (2011).

Claybrooks, T. (Author & Presenter), Shaffer, J. J. (Author). UNK Student Research Day, "Beetle Juice! Characterization of antimicrobial proteins in Nicrophorus carolinus," Kearney, NE. (2011).

Fields, A. (Author & Presenter), Tillinghast, H. (Author), Shaffer, J. J. (Author). UNK Student Research Day, "Currency as a potential vector of Staphylococcus aureus," Kearney, NE. (2011).

Steelman, E. (Author & Presenter), Shaffer, J. J. (Author), Plantz, B. (Author), Simon, D. M. (Author). Joint Meeting of the Societies for the Study of Evolution, Systematic Biogy, and American Society of Naturalists, "Microbial composition of the Nebraska Sandhills alkaline lake ecosystem," Nebraska Academy of Sciences, Norman, OK. (June 2011).

Strydom, M. (Author & Presenter), Scott, M. (Author), Shaffer, J. J. (Author). Annual Meeting of the Missouri Valley Branch of the American Society of Microbiology, "Characterization of siderophore production by bacteria from hyper alkaline-saline lakes," Manhattan, KS. (2010).

Block, A. A. (Author & Presenter), Shield, C. (Author), Shaffer, J. J. (Author). Annual Meeting of the Missouri Valley Branch of the American Society of Microbiology, "The effects of pH fluctuation on bacteriophage replication isolated from alkaline lakes," Manhattan, KS. (2010).

Shaffer, J. J. (Author & Presenter), Springer, J. T. (Author), Carlson, K. A. (Author & Presenter). CUR: Creating a culture of research on campus, "Creating a curriculum to prepare women for careers in science," Williamsburg, VA. (2010).

Shaffer, J. J. (Author & Presenter), Carlson, K. A. (Author & Presenter), Springer, J. T. (Author & Presenter). Fifth Annual Conference on Applied Learning in Higher Education, "Training women in science: not just a female issue," St. Joseph, MO. (2010).

Claybrooks, T. (Author & Presenter), Shaffer, J. J. (Author). INBRE 9th Annual Meeting, "Beetle Juice! A search for antimicrobial proteins in Nicrophorus marginatus saliva," Grand Island, NE. (2010).

Strydom, M. (Author & Presenter), Scott, M. (Author), Shaffer, J. J. (Author). INBRE 9th Annual Meeting, "Determining siderophore structure and its production rate by alkaline-saline lake bacteria," Grand Island, NE. (2010).

Shaffer, J. J. (Author & Presenter), Plantz, B. A. (Author). INBRE 9th Annual Meeting, "Extreme environments: a treasure trove of novel bacteria," Grand Island, NE. (2010).

Ferrell, A. (Author & Presenter), Widick, D. (Author & Presenter), Shaffer, J. J. (Author). INBRE 9th Annual Meeting, "In the process of cleaning do Drosophila virilis ingest bacteria?," Grand Island, NE. (2010).

Strydom, M. (Author & Presenter), Shaffer, J. J. (Author). Nebraska Academy of Science, "Identification of siderophore production by bacteria from hyper alkaline-saline lakes," Lincoln, NE. (2010).

Edwards, S. (Author & Presenter), Jacques, B. J. (Author), Shaffer, J. J. (Author). Nebraska Academy of Science, "The effects of fly cleaning behavior on bacterial transmission," Lincoln, NE. (2010).

Block, A. A. (Author & Presenter), Shield, C. (Author), Shaffer, J. J. (Author). Nebraska Academy of Science, "The effects of pH fluctuation on bacteriophage isolated from ephemeral, alkaline lakes," Lincoln, NE. (2010).

Contracts, Fellowships, Grants, and Sponsored Research

Currently Under Review

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), "Nebraska Training Network and Functional Genomics, Renewal," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $438,405.00. (April 2015 - March 2020).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), "Nebraska Training Network and Functional Genomics", Project Title: "Bridge Funding"," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $2,344,723.00. (August 2014 - August 2015).

Funded

Shaffer, J. J. (Supporting), Schoenebeck, C. W. (Supporting), Koupal, K. D. (Principal), "Investigation of Conservation Management for Plains Topminnow in Nebraska," Grant, Sponsored by State Wildlife Grant, State, $31,800.00. (October 2014 - December 2017).

Peterson, B. C. (Co-Principal), Shaffer, J. J. (Principal), Koupal, K. D. (Co-Principal), "Monitoring the aquatic health of sandhill lakes in Brown County, NE," Grant, Sponsored by Daugherty Water for Food Institute Undergraduate Scholars Award, State, $14,570.00. (August 2014 - August 2015).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), "Supplement to INBRE Grant – Summer Bridge Funding from UNMC to support INBRE Scholars," Grant, Sponsored by UNMC, State, $8,900.00. (July 2014 - September 2014).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), Reichart, L. M. (Co-Principal), Bourret, T. J. (Co-Principal), Panaitof, S. C. (Co-Principal), "Nebraska Training Network and Functional Genomics," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $1,275,620.00. (April 2009 - March 2014).

Shaffer, J. J. (Supporting), "Nebraska Training Network and Funtional Genomics," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $1,275,620.00. (April 1, 2009 - March 31, 2014).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), ""Administrative Supplement Notice for Students and Science Educators under the Recovery Act", Project Title: "Nebraska Training Network and Functional Genomics",," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $142,516.00. (July 2009 - September 2011).

Shaffer, J. J. (Supporting), "Nebraska Training Network and Functional Genomics: Adminstrative supplement notice for students and science educators under the recovery act," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $142,516.00. (July 1, 2009 - June 30, 2011).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Simon, D. M. (Co-Principal), Shaffer, J. J. (Co-Principal), "Supplement to INBRE Grant Renewal Year 1: Purchase of multiple pieces of equipment," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $54,838.00. (2010).

Shaffer, J. J. (Co-Principal), Plantz, B. A. (Co-Principal), "Understanding microbial communities in hyper alkaline-saline sandhills lakes as an indicator of global warming," Grant, Sponsored by NE Water Center/USGS, State, $60,266.00. (March 1, 2009 - February 1, 2010).

Service

Professional Memberships

Sigma Xi. (2007 - Present).

National Association of Biology Teachers. (2006 - Present).

National Science Teachers Association. (2005 - Present).

American Society of Microbiology. (2003 - Present).

Association of College and University Biology Educators. (2003 - Present).

Academic Advising

Master's Thesis Committee Chair, Biology. (August 2014 - Present).
Advised: Tashia Anderson

Master's Thesis Committee Member. (August 2012 - Present).
Advised: Li Wang

Master's Thesis Committee Member, Biology. (August 2012 - May 2014).
Advised: Adrienne Conley

Master's Thesis Committee Member, Biology. (August 2012 - May 2014).
Advised: Kellie Licking

Master's Thesis Committee Member, Biology. (December 2012).
Advised: Seth Lundgren

Master's Thesis Committee Member, Biology. (May 2012).
Advised: Ethan Cordes

Master's Thesis Committee Member, Business Administration. (July 2011).
Advised: Martha Montanez

Master's Thesis Committee Member, Biology. (July 2011).
Advised: Shelly McPherron

2013-2014

Undergraduate Students Advised: 5

Graduate Students Advised: 13

Service – Department

Faculty mentor, Faculty mentor. (May 2012 - Present).

Committee Chair, Science Day at UNK. (2012 - Present).
Committee Member, Biology Department Peer-review Committee. (2011 - Present).
Committee Chair, Graduate Committee. (August 2010 - Present).
Committee Chair, Lab Fees. (August 2004 - Present).
Tour Guide, Health Science Career Fair. (October 2012).
Committee Chair, Public Health Asst Professor Search. (September 2011 - March 2012).
Committee Member, Biology Department Curriculum Committee. (2004 - 2010).
Committee Member, Biology Department Graduate Committee. (2001 - 2010).

Service – College

Committee Member, UNK Health Advisory Committee. (2012 - Present).
Committee Member, KHOP Selection Committee--medicine. (2010 - Present).
Committee Member, Chemistry Department Promotion. (2013).
Committee Member, Post Tenure Review Committee. (2012).
Committee Member, Health Science Program Review. (2011).
Committee Member, Chemistry Department Promotion Committee. (2010).
Committee Member, CSIS Department Promotion Committee. (2010).
CNSS Representative, Graduate Studies and Research Program Review. (2010).
Faculty representative, Talked to Representative Glohr. (2010).

Service – University

Committee Member, Presidential Search Committee. (May 2014 - Present).
Committee Member, Grievance Committee. (2013 - Present).
Presenter, Homeland Security Policy Group Meeting. (May 2004 - Present).
Committee Member, Graduate Council. (2002 - Present).
Committee Member, Executive Graduate Council. (2005 - 2014).
Committee Member, UNK Steering Committee. (2004 - 2014).
Committee Member, History Academic Program Review. (2013).
Committee Member, NCA Preparation Team: Criterion 2. (2012 - 2013).
Committee Member, Director of the Office of Sponsored Programs Search. (September 2012 - April 2013).
Committee Member, Pratt-Heins Foundation Awards Selection Committee. (2011 - 2012).
Committee Member, MS in Emergency Preparedness Review at UNMC. (January 2012).
Faculty representative, President's Legislative dinner. (2011).
Moderator, Student Research Day. (2011).
Faculty representative, UNK Showcase. (2011).
CPR and AED Trained Faculty for Bruner Hall. (2005 - 2011).
Faculty representative, Federal Demonstration Partnership. (2005 - 2011).
Presenter, Chancellor's Evening Celebrating the University of Nebraska at Kearney. (April 2011).
Presenter, President's Annual Legislative dinner. (March 2011).

Service – Professional

Moderator, Nebraska Academy of Science. (2012 - 2014).
Officer, President/Elect/Past, Missouri-Valley Branch of the American Society of Microbiology. (2009 - 2013).

Service – Public

Guest Speaker, Advanced PLT, WET and Wild Educator Workshop. (July 2001 - Present).

Faculty advisor, High school science fair projects. (2010).

Faculty advisor, Middle school science fair project in Kentucky. (2010).

Other

Faculty Development Activities Attended

Meet and greet of STEM educators in NU system, "NU STEM Education meeting," NU system office, Ashland, NE, State. (May 16, 2013 - Present).

Workshop, "IMG-ACT training," Department of Energy Joint Genome Institute, Chamberlain, SD, Regional. (November 17, 2012 - November 18, 2012).

Professor Joseph T. Springer
Biology
(308) 895-8920
Email: springerj@unk.edu

Academic Degrees

PhD, Washington State University, 1977.
Major: Zoology
MS, Washington State University, 1976.
Major: Wildlife Biology
BA, Knox College, 1971.
Major: Biology

Licensures and Certifications

Certified Wildlife Biologist, The Wildlife Society. (1979 - Present).

Administrative Data – Permanent

Starting Rank: Professor
Start Date at University of Nebraska at Kearney: August 27, 1979
Date Attained Rank of Assistant Professor: August 27, 1979
Date Attained Rank of Associate Professor: August 15, 1985
Date Attained Rank of Full Professor: August 15, 1994
Tenure Decision Date: August 1, 1985

Teaching

Scheduled Teaching

Fall 2010

BIOL 474, Mammalogy, 3 credit hours, 11 students enrolled, On Campus.
BIOL 474, Mammalogy, 0 credit hours, 11 students enrolled, On Campus.

Spring 2011

BIOL 201, Fund Tools for Biologic Stds, 2 credit hours, 12 students enrolled, On Campus.
BIOL 462, Animal Behavior, 3 credit hours, 18 students enrolled, On Campus.
BIOL 462, Animal Behavior, 0 credit hours, 18 students enrolled, On Campus.

Summer 2011

BIOL 862P, Animal Behavior, 3 credit hours, 25 students enrolled, Web Based.

Fall 2011

BIOL 330, Wildlife Conservation, 3 credit hours, 23 students enrolled, On Campus.
BIOL 330, Wildlife Conservation, 0 credit hours, 23 students enrolled, On Campus.

Spring 2012

BIOL 405, Range & Wildlife Mgt, 3 credit hours, 24 students enrolled, On Campus.
BIOL 405, Range & Wildlife Mgt, 0 credit hours, 24 students enrolled, On Campus.

BIOL 805P, Range & Wildlife Mgt, 3 credit hours, 2 students enrolled, On Campus.
BIOL 805P, Range & Wildlife Mgt, 0 credit hours, 2 students enrolled, On Campus.

Summer 2012
BIOL 869, Conserv Birds & Mammals, 3 credit hours, 25 students enrolled, Web Based.

Spring 2013
BIOL 462, Animal Behavior, 3 credit hours, 19 students enrolled, On Campus.
BIOL 462, Animal Behavior, 0 credit hours, 19 students enrolled, On Campus.

Summer 2013
BIOL 462, Animal Behavior, 3 credit hours, 1 students enrolled, Web Based.
BIOL 462, Animal Behavior, 0 credit hours, 1 students enrolled, Web Based.
BIOL 862P, Animal Behavior, 3 credit hours, 25 students enrolled, Web Based.

Fall 2013
BIOL 330, Wildlife Conservation, 3 credit hours, 25 students enrolled, On Campus.
BIOL 330, Wildlife Conservation, 0 credit hours, 25 students enrolled, On Campus.
BIOL 421, Sen Sem Biol, 1 credit hours, 1 students enrolled, On Campus.

Spring 2014
BIOL 405, Range & Wildlife Mgt, 3 credit hours, 25 students enrolled, On Campus.
BIOL 405, Range & Wildlife Mgt, 0 credit hours, 25 students enrolled, On Campus.
BIOL 421, Sen Sem Biol, 1 credit hours, 2 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 1 credit hours, 1 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 3 credit hours, 1 students enrolled, On Campus.

Summer 2014
BIOL 430, Special Topics in Biology, 3 credit hours, 1 students enrolled, On Campus.
BIOL 869, Conserv Birds & Mammals, 3 credit hours, 20 students enrolled, Web Based.

Fall 2014
BIOL 421, Sen Sem Biol, 1 credit hours, On Campus.

Directed Student Learning

Master's Thesis Committee Chair, Biology. (August 21, 2013 - Present).
Advised: Jennifer Frisch

"Rainwater Basin as habitat islands for small mammals.," Biology. (May 15, 2012 - December 5, 2013).
Advised: August Wilson

Directed Individual, "What's Staining the Coyote's Coat?," Biology. (August 2011 - May 5, 2013).
Advised: Jennifer Frish

Scholarship

Intellectual Contributions

Henderson, J. J., Phillips, G., Springer, J. T. (2014). Microhistology of plant material using low-cost materials for polarized light microscopy. *The Microscope, 62*(3), 117-121.

Springer, J. T., Holley, D. (2012). *An Introduction to Zoology: Investigating the Animal World.*.

Wills, H. D., Geluso, K., Smits, E. J., Springer, J. T., Newton, W. E. (2011). Notes on the distribution of eastern woodrats and hispid cotton rats in south-central Nebraska. *Prairie Naturalist, 43*, 127-129.

Filkovsky, G., Springer, J. T. (2010). Interactive use of barbels by spotted goatfish Pseudupeneus maculatus (Bloch, 1793) on the reef of Bonaire, Lesser Antilles. *Open Marine Biology Journal, 4*, 122-124.

Presentations

Frisch, J. (Author & Presenter), Reichart, L. M. (Author), Springer, J. T. (Author). Annual Meeting of the Nebraska Academy of Sciences, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Nebraska Academy of Sciences, Nebraska Wesleyan, Lincoln, NE. (April 11, 2014).

Frisch, J. (Author & Presenter), Springer, J. T. (Author), Reichart, L. M. (Author). Annual Meeting of the Nebraska Chapter of the The Wildlife Society, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Nebraska Chapter of the The Wildlife Society, Kearney, NE. (February 2014).

Frisch, J. (Author & Presenter), Springer, J. T. (Author), Reichart, L. M. (Author). 74th Midwest Fish and Wildlife Conference, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Midwest Fish and Wildlife Agencies, Kansas City, MO. (January 2014).

Frisch, J. (Author & Presenter), Springer, J. T., Reichart, L. M. Student Research Day, "What's Staining the Coyote's Coat?," UNK, Kearney, NE. (April 2013).

Frisch, J. (Presenter), Springer, J. T., Reichart, L. M. Student Research Day, "What's Staining the Coyote's Coat?," UNK. (April 2013).

Shaffer, J. J. (Author & Presenter), Springer, J. T. (Author), Carlson, K. A. (Author & Presenter). CUR: Creating a culture of research on campus, "Creating a curriculum to prepare women for careers in science," Williamsburg, VA. (2010).

Shaffer, J. J. (Author & Presenter), Carlson, K. A. (Author & Presenter), Springer, J. T. (Author & Presenter). Fifth Annual Conference on Applied Learning in Higher Education, "Training women in science: not just a female issue," St. Joseph, MO. (2010).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Jacques, B. J. (Co-Principal), Carlson, K. A. (Co-Principal), Springer, J. T. (Co-Principal), Petersen, J. L. (Co-Principal), "Open access textbook pilot," Grant, Sponsored by NU System, Other, $50,000.00. (January 2015 - Present).

Service

Administrative Assignments

Department Chairperson, Department. (August 15, 2011 - Present).

Professional Memberships

Nebraska Academy of Science. (1990 - Present).

Sigma Xi. (1989 - Present).

Nebraska Chapter of The WIldlife Society. (1979 - Present).

The Wildlife Society. (1972 - Present).

Academic Advising

Master's Thesis Committee Chair, Biology. (August 21, 2013 - Present).
Advised: Jennifer Frisch

2013-2014

Undergraduate Students Advised: 38

Graduate Students Advised: 1

Dr. Janet E. Steele
Biology
(308) 865-8325
Email: steelej@unk.edu

Academic Degrees

PhD, Miami University, 1991.

Major: Zoology (Physiology)

Dissertation Title: Effects of swim-training and footshock stress on autonomic nervous system activity in female borderline hypertensive rats

MS, Eastern Illinois University, 1987.

Major: Environmental Biology

Dissertation Title: Breeding bird census in woodland habitat

BS, Eastern Illinois University, 1986.

Major: Botany (with teacher certification)

BS, Texas A&M University, 1984.

Major: Bioenvironmental Science

Licensures and Certifications

Controlled substance registration certificate, United States Department of Justice. (November 11, 2011 - May 31, 2014).

Administrative Data – Permanent

Starting Rank: Associate Professor

Start Date at University of Nebraska at Kearney: August 16, 1993

Date Attained Rank of Associate Professor: August 17, 1998

Date Attained Rank of Full Professor: August 15, 2005

Tenure Decision Date: August 1, 1999

Academic, Government, Military and Professional Positions

Courtesy Adjunct Associate Professor, Department of Cell Biology and Anatomy, University of Nebraska Medical Center, Academic - Post-Secondary. (2002 - 2007).

Post-Doctoral Fellow, Medical College of Ohio, Toledo, Academic - Post-Secondary. (August 1991 - June 1993).

Awards and Honors

Pratt-Heins Foundation Faculty Award in Teaching, Teaching, University. (August 2014).

Mortar Board Certificate of Appreciation, UNK Mortar Board, Teaching, University. (2011).

Teaching

Scheduled Teaching

Fall 2010

BIOL 225, Anatomy/Physiology, 4 credit hours, 55 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 4 credit hours, 118 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 23 students enrolled, On Campus.

Spring 2011

BIOL 226, Anat/Physio, 4 credit hours, 38 students enrolled, On Campus.

BIOL 226, Anat/Physio, 4 credit hours, 93 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 20 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 22 students enrolled, On Campus.

Summer 2011
BIOL 858, Physiology of Stress, 3 credit hours, 27 students enrolled, Web Based.

Fall 2011
BIOL 225, Anatomy/Physiology, 4 credit hours, 79 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 4 credit hours, 134 students enrolled, On Campus.

Spring 2012
BIOL 226, Anat/Physio, 4 credit hours, 43 students enrolled, On Campus.
BIOL 226, Anat/Physio, 4 credit hours, 120 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 17 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 21 students enrolled, On Campus.

Summer 2012
BIOL 858, Physiology of Stress, 3 credit hours, 30 students enrolled, Web Based.

Fall 2012
BIOL 225, Anatomy/Physiology, 4 credit hours, 78 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 4 credit hours, 172 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 24 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 24 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 24 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 23 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 16 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 22 students enrolled, On Campus.

Spring 2013
BIOL 226, Anat/Physio, 4 credit hours, 44 students enrolled, On Campus.
BIOL 226, Anat/Physio, 4 credit hours, 138 students enrolled, On Campus.

Summer 2013
BIOL 858, Physiology of Stress, 3 credit hours, 29 students enrolled, Web Based.

Fall 2013
BIOL 225, Anatomy/Physiology, 4 credit hours, 60 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 4 credit hours, 164 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 21 students enrolled, On Campus.
BIOL 225, Anatomy/Physiology, 0 credit hours, 22 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 18 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 17 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 22 students enrolled, On Campus.

BIOL 225, Anatomy/Physiology, 0 credit hours, 17 students enrolled, On Campus.

Spring 2014

BIOL 226, Anat/Physio, 4 credit hours, 35 students enrolled, On Campus.

BIOL 226, Anat/Physio, 4 credit hours, 140 students enrolled, On Campus.

BIOL 226, Anat/Physio, 0 credit hours, 21 students enrolled, On Campus.

BIOL 226, Anat/Physio, 0 credit hours, 22 students enrolled, On Campus.

BIOL 226, Anat/Physio, 0 credit hours, 22 students enrolled, On Campus.

Summer 2014

BIOL 858, Physiology of Stress, 3 credit hours, 15 students enrolled, Web Based.

Directed Student Learning

Directed Individual, "Effect of gluten-free diet on smooth muscle contraction in rats," Biology. (January 2014 - Present).
Advised: Blake Brouilette

Directed Individual, "Effect of lavendar scent on savliary cortisol in long-term care residents," Biology. (January 2014 - Present).
Advised: Kelly Messbarger

Directed Individual, "Effect of cranberry juice on urinary function in mice," Biology. (January 2014 - Present).
Advised: Robert Kirkland

Directed Individual, "A survey of fruits eaten by Tapirus terrestris, the lowland tapir, based on the presence of seeds in the feces in the Cerrado region of Mato Grosso, Brazil," Biology. (December 2014).
Advised: Angela Cayce

Directed Individual, "Characterization of the spatial distribution of the aquatic caterpillar, Petrophila sp,in streams of the Cerrado of Brazil," Biology. (December 2014).
Advised: Anna-Marie Easley

Directed Individual, "Effect of salinity extremes within an estuarine environment on the fecundity of Palaemonetes pugio," Biology. (December 2014).
Advised: Destin Rutherford

Directed Individual, "Influence of environmental pH on goldfish (Carassius auratus) white blood cell counts," Biology. (December 2014).
Advised: Dustin Franklin

Directed Individual, "Effects of pasture rotation on plant biomass in the Cerrado Highlands," Biology. (December 2014).
Advised: Julia Brown

Directed Individual, "A comparison study of online biology students to face to face biology students at a community college," Biology. (December 2014).
Advised: Karla Duncan

Directed Individual, "Feeding preferences of blue land crab Cardisoma guanhumi," Biology. (December 2014).
Advised: Margaret McCord

Directed Individual, "Shedding light on praying mantis hunting," Biology. (December 2014).
Advised: Stephanie Brubeck

Directed Individual, "Influence of resveratrol on blood cholesterol in rats fed a high fat diet," Biology. (January 2014 - October 2014).
Advised: Katelyn Baumgart, Megan Byrnes

Directed Individual, "Occurrence of acute mountain sickness (AMS) at Mount Mitchell, NC (altitude 2037m)," Biology. (August 2014).
Advised: David East

Directed Individual, "Effect of Gluten on Total Body Weight," Biology. (August 2014).
Advised: Paul Wagner

Directed Individual, "Effect of Nutritional Stress of Autistic-like Behaviors in Neuroligin-Deleted Caenorhabditis elegans," Biology. (May 2014).
Advised: Ilse Kremer

Directed Individual, "Monitoring Fecal Glucocorticoid Metabolites (FGM) to Evaluate Stress Response in Orangutans (Pongo pygmaeus) During Transport," Biology. (May 2014).
Advised: Sharon Cisneros

Directed Individual, "Effect of blueberries on memory in older mice," Biology. (January 2014 - May 2014).
Advised: Jaci Meyer

Directed Individual, Biology. (August 2013 - May 2014).
Advised: Abby Larson

Directed Individual, "Effects of Exercise on the Ability to Learn," Biology. (August 2013 - May 2014).
Advised: Victoria Brauer

Directed Individual, "Effect of caffeinated beverages on spontaneous activity in laboratory mice (Mus musculus)," Biology. (June 2013 - December 2013).
Advised: Samuel Swartz

Directed Individual, "Erythropoietin Levels in Rats Exposed to Smoke and Exercise," Biology. (June 2013 - December 2013).
Advised: Sarah Krause

Directed Individual, "Differences in Blood Pressure Lowing Effects of Beetroot Juice and Neo40 Daily®," Biology. (August 2013).
Advised: Allen Chezick

Directed Individual, "Feasibility Study of Glycated Hemoglobin Levels to Determine the Average Blood Glucose in Equine Samples," Biology. (May 2013).
Advised: Carrie Buckley

Directed Individual, Biology. (May 2013).
Advised: Robert Caballero

Supervised Research - UGRD, "Effects of cigarette smoke on uterine wall contractions in non-pregnant Long Evans rats," Biology. (May 2013).
Advised: Kyle Gibbens

Directed Individual, "Effect of carbohydrate source on blood glucose levels in female Long Evans rats," Biology. (January 2013 - May 2013).
Advised: Kaitlyn Mimick

Directed Individual, "Incorporation of supplemental creatine in female mice," Biology. (August 2012 - May 2013).
Advised: Kasey Schroeder

Directed Individual, "Comparison of the effectiveness of chemical and natural equine fly sprays on repelling landing flies," Biology. (December 2012).
Advised: Heather Peterson

Directed Individual, "Comparison of photosynthesis and yield among three potato cultivars in south-central Nebraska," Biology. (December 2012).
Advised: Jeffrey Hamik

Directed Individual, "Influence of zinc supplementation on three self-reported respiratory health indicators in a sample of adolescent distance runners," Biology. (December 2012).
Advised: Scott Christensen

Directed Individual, "The effects of comparison between muscle manipulation and joint malalignment adjustment techniques on the range of motion of osteoarthritic knees," Biology. (December 2012).
Advised: Yumiko Muroi

Master's Thesis Committee Member, "Corticosterone levels in sub-adult and family groups of whoopping cranes (Grus americana) in windering locations of Lamar Penninsula, TX," Biology. (December 2012).
Advised: Mery Casady

Directed Individual, "Influence of smoking on uterine responses to oxytocin in non-pregnant Long Evans rats," Biology. (June 2012 - December 2012).
Advised: Kyle Gibbens

Directed Individual, "Effectiveness of Acai Pure® as a dietary supplement for increasing weight loss in overweight individuals," Biology. (August 2011 - December 2012).
Advised: Desiree Assemain

Directed Individual, Biology. (August 2011 - December 2012).
Advised: Thea Baum

Directed Individual, Biology. (January 2012 - September 2012).
Advised: Jacqueline Nunez

Directed Individual, "The role of hypoxia inducible factors on long term potentiation during hypoxia," Biology. (August 2012).
Advised: Kirsty Conn

Directed Individual, "Rates of perceived exertion in persons with Down syndrome," Biology. (August 2012).
Advised: Samantha Kramer

Directed Individual, "Moderate altitude to sea level de-acclimatization and re-acclimatization: effect of class year during winter break," Biology. (May 2012).
Advised: Courtney Hemmert

Directed Individual, "A comparison of corticotropin-releasing hormone and adrenocorticotropic hormone levels between milk harvested from organic dairies and conventional dairies," Biology. (May 2012).
Advised: Timothy Cifelli

Directed Individual, "Effects of administration of adrenergic blockers on memory capacity in Mus musculus and Rattus norvegicus," Biology. (August 2011 - May 2012).
Advised: Brett Schaepler

Directed Individual, "Power Balance Bands®: breakthrough or bust," Biology. (August 2011 - May 2012).
Advised: Chris Deans

Directed Individual, "Role that an interest in pre-health related studies has on basic health knowledge," Biology. (August 2011 - March 2012).
Advised: Megan Null

Directed Individual, "Effectiveness of the Frayer Vocabulary Model on science vocabulary retention and application," Biology. (December 2011).
Advised: Amanda Wakeman

Directed Individual, "Central nervous system – an investigation of Semaphorin 7A and Netrin 1 on E18 rat," Biology. (December 2011).
Advised: Christopher Dorey

Directed Individual, "A comparison of different techniques to identify the palmaris longus muscle," Biology. (December 2011).
Advised: Jenna Simpson

Directed Individual, "Tadpole development in Langly Pond," Biology. (December 2011).
Advised: Jennifer Mestres

Directed Individual, "Effects of chocolate milk as a post-exercise beverage on muscle recovery in intercollegiate female soccer athletes," Biology. (December 2011).
Advised: Katie Larghe

Directed Individual, "Telavancin in experimental murine pneumococcal pneumonia," Biology. (December 2011).
Advised: Suzannah Schmidt

Directed Individual, "Evidence of trailing behavior by the grain mite, Acarus siro," Biology. (November 2011).
Advised: Brian Sass

Directed Individual, "The effect of predator type and size on the alarm call of the Carolina chickadee.," Biology. (August 2011).
Advised: Amanda Zachritz

Directed Individual, "The effects of Zumba on range of motion for arthritic individuals," Biology. (August 2011).
Advised: Amber Samuel

Directed Individual, "Prevalence of Giardia positive dogs in the city versus the suburb," Biology. (August 2011).
Advised: Nicole Yambrick

Directed Individual, "Histological comparison of microbial elicited inflammatory responses and spontaneous inflammatory responses in interleukin-10 knockout mice.," Biology. (August 2011).
Advised: Raymond Dann

Directed Individual, "White-tailed deer response to red and blue-green optical warning fence," Biology. (May 2011).
Advised: Amy Troyer

Directed Individual, "Effect of 5-hour Energy® on the spontaneous activity of mice," Biology. (May 2011).
Advised: Audra Kennedy

Directed Individual, "Survey on the role that formal and non-formal education plays on individuals' decision making regarding the dangers of sun exposure," Biology. (May 2011).
Advised: Chad Springer

Directed Individual, "Effects of swimming exercise on glucose tolerance in diabetic KK-Ay mice," Biology. (May 2011).
Advised: Mathew Day

Directed Individual, "Incidence of concussive head trauma treated in emergency departments," Biology. (May 2011).
Advised: Rebecca Liberty

Directed Individual, "Influence of soy protein and exercise on testosterone levels in male rats," Biology. (December 2010).
Advised: Jarod Weidner

Directed Individual, "Impacts of the zoo environment on the stress response of captive felid and pachyderm species at the Brookfield Zoo," Biology. (December 2010).
Advised: Jocelyn Bryant

Directed Individual, "Marine diatoms from the western Pacific island of Guam found with farmer fish territories," Biology. (December 2010).
Advised: Lydell Lopez

Directed Individual, "Influence of smoking on visions disorders." (December 2010).
Advised: Nicole Obermeier

Directed Individual, "Influence of age on prevalence of horizontal gaze nystagmus cues in healthy persons," Biology. (August 2010).
Advised: Jayme Dozier

Directed Individual, "In vivo specular microscopic tracking of endothelial cell loss and subsequent regeneration in the central cornea of albino rabbits," Biology. (August 2010).
Advised: Nicholas Langevin

Directed Individual, "Two-week transbullar repeated dose and hearing threshold study in chinchillas with administration of neomycin," Biology. (August 2010).
Advised: Pam Buie

Directed Individual, "The effect of inhaled nicotine on acute cigarette craving in healthy adult male smokers," Biology. (August 2010).
Advised: Richard Morishige

Directed Individual, "A population estimate of the Richardson's ground squirrel on Minot Air Force Base," Biology. (August 2010).
Advised: Samuel Murry

Directed Individual, "Effects of 5-Hour Energy Drink® on human mood, concentration, and endurance," Biology. (May 2010).
Advised: Adam Schapmann

Directed Individual, "Lead in drinking water: Sampling in primary schools and preschools in south central Kansas," Biology. (May 2010).
Advised: Anne Massey

Directed Individual, "Influence of potted plants on cigarette particulates in a confined space," Biology. (May 2010).
Advised: John Shoup

Directed Individual, "The effect of human population on endocrine disruption incidences in aquatic species in the Potomac River," Biology. (May 2010).
Advised: Luann Shoemaker

Scholarship

Intellectual Contributions

Jellish, W. S., Sherazee, G., Patel, J., Cunanan, R., Steele, J. E., Garibashvilli, K., Baldwin, M., Answeson, D., Leonetti, J. P. (2013). Somatosensory evoked potential monitoring to detect brachial plexus injury after positioning patients for lateral skull base surgery. *Otolaryngology - Head and Neck Surgery, 149*(1), 168-173.

Massey, A., Steele, J. E. (2012). Lead in drinking water: Sampling in primary schools and preschools in south central Kansas. *Journal of Environmental Health, 74*(7), 16-20.

Presentations

Gibbens, K. (Author & Presenter), Steele, J. E. (Author). National Council on Undergraduate Research, "Effects of cigarette smoke on uterine wall contractions in non-pregnant Long Evans rats," Stevens Point, WI. (2013).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Steele, J. E. (Supporting), Brown, G. A. (Principal), "Biochemistry Laboratory Experiences for Exercise Science Students," Grant, Sponsored by Kelly Fund, State, $23,947.00. (August 2014 - July 2016).

Service

Professional Memberships

American Association for Laboratory Animal Science. (2004 - Present).

Councilor, 1999-2002 term, 2005-2008 term; Secretary-Treasurer, 2001-2003, Nebraska Physiological Society. (1998 - Present).

Nebraska Academy of Sciences. (1997 - Present).

Human Anatomy and Physiology Society. (1994 - Present).

Foundation for Biomedical Research. (1993 - Present).

American Physiological Society. (1990 - Present).

Academic Advising

Master's Thesis Committee Member, "Corticosterone levels in sub-adult and family groups of whoopping cranes (Grus americana) in windering locations of Lamar Penninsula, TX," Biology. (December 2012).
Advised: Mery Casady

2009-2010

Undergraduate Students Advised: 18

2010-2011

Undergraduate Students Advised: 15

Graduate Students Advised: 331

2011-2012

Undergraduate Students Advised: 12

Graduate Students Advised: 396

2012-2013

Undergraduate Students Advised: 6

Graduate Students Advised: 432

2013-2014

Undergraduate Students Advised: 3

Graduate Students Advised: 442

Service – Department

Committee Member, Biology Graduate Assessment Committee. (2011 - Present).

Committee Chair, Biology Graduate Research Committee. (2011 - Present).

Director, Distance MS Program. (2010 - Present).

Secretary, Department of Biology department meetings. (2000 - Present).

Committee Member, Biology Department Graduate Committee. (1998 - Present).

Department of Biology Search Committees. (1996 - Present).

Loper Preview Day. (2012).

Service – College

Committee Member, CNSS Rank and Tenure. (October 2013 - Present).

Committee Chair, Institutional Animal Care and Use Committee. (September 2013 - Present).

Committee Member, Health Sciences Advisory Committee. (1993 - Present).

Regional Science Fair Judge. (March 11, 2014).

AED/CPR certification. (2013).

KHOP Building Tour. (December 17, 2013).

Health Sciences Fair Building Tours. (October 9, 2013).

Blue and Gold Showcase. (August 2013).

Committee Member, R&T Committee for Dr. Annette Moser. (2012).

Committee Member, R&T Committee for Dr. Syed Hossain. (2011 - 2012).

Committee Chair, R&T Committee for Dr. Syed Hossain. (2010 - 2011).

Service – University

Committee Member, Allied Health Science Education Strategic Planning / Building Committee. (2012 - Present).

Varsity Women's Volleyball Official Scorekeeper. (1993 - Present).

Committee Member, Reaccreditation Criterion 4 team (Teaching and Learning). (2012 - 2013).

Committee Member, Health Science Education Complex Naming Committee. (2012).

Building tours, KHOP Pharmacy and Medicine Finalists. (2012).

Committee Member, UNK Strategic Planning Committee. (2004 - 2012).

Academic appointments, Omaha World Herald / Kearney Hub Scholarship Finalists. (2011).

Secretary, Faculty Senate Athletic Committee. (2003 - 2010).

Service – Professional

Reviewer, Conference Paper, National Council for Undergraduate Research. (2013).

Keith David Koupal
Biology
Email: KOUPALKD@UNK.EDU

Administrative Data – Permanent

Starting Rank: Lecturer

Start Date at University of Nebraska at Kearney: August 16, 2004

Date Attained Rank of Lecturer: August 16, 2004

Teaching

Scheduled Teaching

Spring 2011

BIOL 884, Freshwater Management Techniq, 3 credit hours, 27 students enrolled, Web Based.

Summer 2011

BIOL 863, Biological Perspectives, 3 credit hours, 16 students enrolled, Web Based.

Spring 2012

BIOL 884, Freshwater Management Techniq, 3 credit hours, 11 students enrolled, Web Based.

Summer 2012

BIOL 863, Biological Perspectives, 3 credit hours, 14 students enrolled, Web Based.

Summer 2013

BIOL 863, Biological Perspectives, 3 credit hours, 7 students enrolled, Web Based.

Fall 2013

BIOL 884, Freshwater Management Techniq, 3 credit hours, 6 students enrolled, On Campus.

BIOL 884, Freshwater Management Techniq, 3 credit hours, 17 students enrolled, Web Based.

Fall 2014

BIOL 884, Freshwater Management Techniq, 3 credit hours, Web Based.

Scholarship

Intellectual Contributions

Olds, B., Peterson, B. C., Koupal, K. D., Schoenebeck, C. W., Farnsworth Hoback, K. M., Hoback, W. W. (2014). Zooplankton density increases in an irrigation reservoir during drought conditions. *Transactions of Nebraska Academy of Sciences*(34), 27-32. digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1466&context=tnas

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2013). Assessment of a Rotenone Application Event at Morman Island West Lake in Central Nebraska. *Nebraska Academy of Sciences, 33*, 1-6.

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2013). *Community assessment of physiochemical attributes, zooplankton, macroinvertebrates, and predator-prey interactions involving fish in Harlan County Reservoir. Federal Aid to Fish Restoration: Annual Performance Report 2011-2013*.

Schumann, D., Koupal, K. D., Schoenebeck, C. W., Hoback, W. W. (2013). Evaluation of sprayed fluorescent pigment as a method to mass-mark fish. *The Open Fish Science Journal, 6*, 41-47.

Smith, M. J., Shaffer, J. J., Koupal, K. D., Hoback, W. W. (2012). Laboratory measures of filtration by freshwater mussels: an activity to introduce biology students to an increasingly threatened group of organisms. *Bioscene, 38*(2), 10-15.

Peterson, B. C., Fryda, N., Sellars, B., Koupal, K. D. (2011). Assessment of Water Quality and Response Rate of Zooplankton in a Nebraska "Borrow Pit" After Rotenone Application. *Transactions of the Nebraska Academy of Sciences, 32*, 69-74.

Katt, J., Peterson, B. C., Koupal, K. D., Schoenebeck, C. W., Hoback, W. W. (2011). Changes in Relative Abundance of Adult Walleye and Egg Density Following the Addition of Walleye Spawning Habitat in a Midwest Irrigation Reservoir. *Journal of Freshwater Ecology, 26*, 51-58.

Maline, K., Peterson, B. C., Koupal, K. D., Hoback, W. W. (2011). Distribution of Zooplankton in Harlan County Reservoir, Nebraska. *Transactions of the Nebraska Academy of Sciences, 32*, 79-83.

Sullivan, C., Koupal, K. D., Hoback, W. W., Peterson, B. C., Schoenebeck, C. W. (2011). Food Habits and Abundance of Larval Freshwater Drum in a South-Central Nebraska Irrigation Reservoir. *Journal of Freshwater Ecology, 27*, 111-121.

Sullivan, C., Schoenebeck, C. W., Koupal, K. D., Hoback, W. W., Peterson, B. C. (2011). Patterns of Age-0 Gizzard Shad Abundance and Food Habits in a Nebraska Irrigation Reservoir. *Prairie Naturalist, 43*, 110-116.

Olds, B., Peterson, B. C., Koupal, K. D., Farnsworth Hoback, K. M., Schoenebeck, C. W., Hoback, W. W. (2011). Water Quality Parameters of Nebraska Reservoir Differ Between Drought and Normal Conditions. Lake and Reservoir Management. *Lake and Reservoir Management, 27*, 229-234.

Koupal, K. D., Peterson, B. C. (2010). *Assessing Changes in Community Structure, Bluegill Growth and Feeding Habits Following the Introduction of Glass Shrimp in South-Central Nebraska "Borrow" Pits.*.

Koupal, K. D., Peterson, B. C., Schoenebeck, C. W. (2010). *Community assessment of zooplankton, larval gizzard shad, productivity, and physiochemical attributes in Harlan County Reservoir. Federal Aid to Fish Restoration: Annual Performance Report 2009-2010*.

Katt, J., Schoenebeck, C. W., Koupal, K. D., Peterson, B. C., Hoback, W. W. (2010). Correlation of Mature Walleye Relative Abundance to Egg Density. *The Prairie Naturalist, 42*, 145-147.

Presentations

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). 63rd Annual Great Plains Fisheries Workers Association Workshop, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.." (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). 74th Annual Midwest Fish and Wildlife Conference, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kansas City, MO. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). 74th Midwest Fish and Wildlife Conference, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.," Kansas City, MO. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). Iowa – Nebraska Joint American Fisheries Society Meeting, "Ontogenetic Diet Shifts and Growth Potential of Age-0 Walleye within a Nebraska Irrigation Reservoir.," American Fisheries Society Meeting. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). Joint Meeting of Nebraska and Iowa Chapters of the American Fisheries Society, "Characterizing the abiotic and biotic components of Nebraska I-80 lakes: implications for growth of stocked fish," Council Bluffs, IA. (2014).

Pawlak, R. (Author & Presenter), Schoenebeck, C. W. (Author), Shaffer, J. J. (Author), Koupal, K. D. (Author). UNK Student Research Day, "Characterizing the abiotic and biotic components of Nebraska Interstate-80 lakes: implications for growth of stocked fish," Kearney, NE. (2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Carlson, K. A. (Author), Koupal, K. D. (Author). Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries

Society, "Picking from the menu: age - 0 walleye food habits and ontogenetic diet. d," Joint Meeting with the Esocid and Centrachid Technical Committees, La Crosse, WI. (July 2014).

Woiak, Z. (Author), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). UNK Student Research Day, "The Impacts of Ontogenetic Diet Shifts on the Growth Potential of Age-0 Walleye," University of Nebraska at Kearney, Kearney, NE. (April 10, 2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). IA-NE Joint Chapter Meeting of the American Fisheries Society, "Seasonal and Annual Changes in Taxa-specific Zooplankton Density during a Complete Drought Cycle," Council Bluffs, IA. (February 2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). 74th Midwest Fish and Wildlife Conference, "Seasonal and Annual Changes in Taxa-specific Zooplankton Density during a Complete Drought Cycle," Kansas City, MO. (January 26, 2014).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Carlson, K. A. (Author). Annual Meeting of the Walleye Technical Committee of the North Central Division of the American Fisheries Society, "Investigating the impact of ontogenetic diet shifts on the growth of age-0 walleye," Joint Meeting with the Esocid and Centrachid Technical Committees, Wausau, WI. (July 2013).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C., Hoback, W. W. (Author). 15th Annual Student Research Day, "Seasonal Changes in Zooplankton Density within Harlan County Reservoir.," University of Nebraska at Kearney, Kearney, Nebraska. (April 2013).

Woiak, Z. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author). Nebraska Chapter of the American Fisheries Society, "Seasonal and Annual Changes in Zooplankton Density within Harlan County Reservoir," Gretna, Nebraska. (February 2013).

Schissel, A. (Author & Presenter), Siegel, C. (Author), Peterson, B. C. (Author), Koupal, K. D. (Author). 14th Annual Student Research Day, "Longevity of Mineral Supplements with in the Soil and Associated Use by White-tailed Deer (Odocoilues virginianus)," University of Nebraska at Kearney, Kearney, Nebraska. (April 2012).

Peterson, B. C. (Author & Presenter), Koupal, K. D. (Author), Fryda, N. J. (Author), Sellers, B. (Author). 71st Midwest Fish and Wildlife Conference, "Changes in Water Quality and Re-establishment of Zooplankton to Consider when Restocking Sport-fish after Rotenone Application," Minneapolis, Minnesota. (December 2010).

Katt, J. D. (Author & Presenter), Schoenebeck, C. W. (Author), Koupal, K. D. (Author), Peterson, B. C. (Author), Hoback, W. W. (Author). 71st Midwest Fish and Wildlife Conference, "Correlation of Walleye Electrofishing and Gill Net Captures Rates to Walleye Egg Density in Sherman Reservoir, Nebraska," Minneapolis, Minnesota. (December 2010).

Sullivan, C. L. (Author & Presenter), Uphoff, C. S. (Author), Koupal, K. D. (Author), Hoback, W. W. (Author), Peterson, B. C. (Author), Schoenebeck, C. W. (Author). 71st Midwest Fish and Wildlife Conference, "Freshwater Drum Food Habits in a South-Central Irrigation Reservoir," Minneapolis, Minnesota. (December 2010).

Peterson, B. C. (Author & Presenter), Koupal, K. D. (Author), Fryda, N. (Author), Sellars, B. (Author). Nebraska Chapter of the American Fisheries Society, "Assessment of Water Quality and Response Rate of Zooplankton in a Nebraska “Borrow Pit” after Rotenone Application.," Ponca, Nebraska. (February 2010).

Katt, J. (Author & Presenter), Koupal, K. D. (Author), Schoenebeck, C. W. (Author), Peterson, B. C. (Author), Hoback, W. W. Nebraska Chapter of the American Fisheries Society, "Changes in walleye egg density and adult abundances due to the addition of cobble substrate in Sherman Reservoir.," Ponca, Nebraska. (February 2010).

Sullivan, C. (Author & Presenter), Uphoff, C. (Author), Koupal, K. D. (Author), Hoback, W. W. (Author), Peterson, B. C. (Author), Schoenebeck, C. W. (Author). Nebraska Chapter of the American Fisheries Society, "Freshwater Drum Food Habits in a South-Central Irrigation Reservoir.," Ponca, Nebraska. (February 2010).

Olds, B. (Author & Presenter), Peterson, B. C. (Author), Koupal, K. D. (Author), Farnsworth Hoback, K. M. (Author), Schoenebeck, C. W. (Author), Hoback, W. W. (Author). Nebraska Chapter of the American Fisheries Society, "Unexpected changes in turbidity and chlorophyll in a Nebraska reservoir following severe drought.," Ponca, Nebraska. (February 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Hoback, W. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Re-establishment of plains topminnow in historical locations.," Grant, Sponsored by Nebraska Game and Parks, State, $26,400.00. (2010 - 2011).

Funded

Shaffer, J. J. (Supporting), Schoenebeck, C. W. (Supporting), Koupal, K. D. (Principal), "Investigation of Conservation Management for Plains Topminnow in Nebraska," Grant, Sponsored by State Wildlife Grant, State, $31,800.00. (October 2014 - December 2017).

Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Changes in community energy flow of Nebraska lakes following restoration efforts using stable isotope analysis," Grant, Sponsored by United States Fish and Wildlife Service, Federal, $5,000.00. (2012 - 2017).

Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Production of yellow perch in Nebraska lakes," Grant, Sponsored by Nebraska Game and Parks Sport Fisheries Fund, State, $331,245.00. (2010 - 2015).

Peterson, B. C. (Co-Principal), Shaffer, J. J. (Principal), Koupal, K. D. (Co-Principal), "Monitoring the aquatic health of sandhill lakes in Brown County, NE," Grant, Sponsored by Daugherty Water for Food Institute Undergraduate Scholars Award, State, $14,570.00. (August 2014 - August 2015).

Hoback, W. W. (Co-Principal), Schoenebeck, C. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Limnological assessment of Harlan County Reservoir 2010-1014," Grant, Sponsored by Nebraska Game and Parks Sport Fisheries Fund, State, $472,744.00. (2010 - 2014).

Hoback, W. W. (Co-Principal), Koupal, K. D. (Co-Principal), "Re-establishment of plains topminnow in historical locations," Grant, Sponsored by Nebraska Game and Parks, State, $26,400.00. (January 2013).

Dr. Letitia M. Reichart
Biology
(308) 865-8568
Email: reichartlm@unk.edu

Academic Degrees

PhD, Washington State University, 2008.

Major: Zoology

Dissertation Title: Conspecific Brood Parasitism In Ruddy Ducks (Oxyura jamaicensis)

BS, Indiana University of Pennsylvania, 2000.

Major: Biology

Supporting Areas of Emphasis: Chemistry

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 17, 2009

Date Attained Rank of Assistant Professor: August 17, 2009

Academic, Government, Military and Professional Positions

Assistant Professor of Biology, University of Nebraska Kearney, Professional/Managerial. (August 2009 - Present).

Lecturer, Washington State University, Professional/Managerial. (August 2008 - July 2009).

Graduate Teaching Assistant, Washington State University, Professional/Managerial. (August 2001 - July 2008).

Awards and Honors

Faculty/Staff Of The Year Award, National Residence Hall Honorary (UNK). (2011).

Faculty/Staff of the Month Awad, National Residence Hall Honorary (UNK). (February 2011).

Elected Member of Sigma XI, University of Nebraska at Kearney Chapter of the Society. (2010).

Teaching

Scheduled Teaching

Fall 2010

BIOL 105, Biology I, 4 credit hours, 191 students enrolled, On Campus.

BIOL 105, Biology I, 0 credit hours, 24 students enrolled, On Campus.

BIOL 201, Fund Tools for Biologic Stds, 2 credit hours, 16 students enrolled, On Campus.

BIOL 201, Fund Tools for Biologic Stds, 2 credit hours, 15 students enrolled, On Campus.

BIOL 830P, Spec Topics In Biology, 2 credit hours, 14 students enrolled, Web Based.

Spring 2011

BIOL 106, Biology II, 0 credit hours, 22 students enrolled, On Campus.

BIOL 106, Biology II, 0 credit hours, 20 students enrolled, On Campus.

BIOL 834, Conservation Biology, 3 credit hours, 26 students enrolled, Web Based.

Fall 2011

BIOL 105, Biology I, 4 credit hours, 188 students enrolled, On Campus.

BIOL 105, Biology I, 0 credit hours, 23 students enrolled, On Campus.

BIOL 105, Biology I, 0 credit hours, 24 students enrolled, On Campus.

BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 15 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 0 credit hours, 16 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 0 credit hours, 15 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 1 credit hours, 1 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 1 credit hours, 25 students enrolled, Web Based.

Spring 2012
BIOL 106, Biology II, 0 credit hours, 23 students enrolled, On Campus.
BIOL 106, Biology II, 0 credit hours, 17 students enrolled, On Campus.
BIOL 473, Ornithology, 3 credit hours, 13 students enrolled, On Campus.
BIOL 473, Ornithology, 0 credit hours, 13 students enrolled, On Campus.
BIOL 873P, Ornithology, 3 credit hours, 1 students enrolled, On Campus.
BIOL 873P, Ornithology, 0 credit hours, 1 students enrolled, On Campus.

Fall 2012
BIOL 105, Biology I, 4 credit hours, 182 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 18 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 21 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 16 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 15 students enrolled, On Campus.
BIOL 830P, Special Topics in Biology, 2 credit hours, 20 students enrolled, Web Based.

Spring 2013
BIOL 106, Biology II, 0 credit hours, 22 students enrolled, On Campus.
BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, 11 students enrolled, On Campus.
BIOL 834, Conservation Biology, 3 credit hours, 25 students enrolled, Web Based.

Fall 2013
BIOL 105, Biology I, 4 credit hours, 162 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 21 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 20 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 19 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 18 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 19 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 20 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 20 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 17 students enrolled, On Campus.
BIOL 105, Biology I, 0 credit hours, 8 students enrolled, On Campus.

Spring 2014
BIOL 106, Biology II, 4 credit hours, 137 students enrolled, On Campus.
BIOL 106, Biology II, 0 credit hours, 23 students enrolled, On Campus.

BIOL 473, Ornithology, 3 credit hours, 12 students enrolled, On Campus.

BIOL 473, Ornithology, 0 credit hours, 12 students enrolled, On Campus.

BIOL 873P, Ornithology, 3 credit hours, 1 students enrolled, On Campus.

BIOL 873P, Ornithology, 0 credit hours, 1 students enrolled, On Campus.

Summer 2014

BIOL 830P, Special Topics in Biology, 3 credit hours, 10 students enrolled, Web Based.

Fall 2014

BIOL 105, Biology I, 4 credit hours, On Campus.

BIOL 105, Biology I, 0 credit hours, On Campus.

BIOL 105, Biology I, 0 credit hours, On Campus.

BIOL 201, Fund Tools for Biologic Studs, 2 credit hours, On Campus.

Directed Student Learning

Supervised Research - UGRD, "Identification of genetic markers useful to measure genetic variability in two Painted Turtle populations," Chemistry. (August 2013 - Present).
Advised: Krissa Lewandowski

Directed Individual, "Use of the Surrogator brooding device to increase sustainable populations of ring-necked pheasants (Phasianus colchicus) in Nebraska," Biology. (January 2013 - Present).
Advised: Ashley Classen

Directed Individual, "Nest defense in pigeons (Columba livia): Effect of predator distance," Biology. (May 2012 - Present).
Advised: Deqa Hassan

Master's Thesis Committee Member, Biology. (2012 - Present).
Advised: Anthony Bridger

Master's Thesis Committee Member, Biology. (2012 - Present).
Advised: Aric Buerer

Directed Individual, "Herpetofauna density camparison of Whites Mill Refuge to the estimated density of herpetofauna of Great Smokey Mountain Nation Park," Biology. (May 2010 - Present).
Advised: James Webb

Directed Individual, "Sex ratio of turtles before and after nesting season at T.O. Fuller State Park, Memphis, Tennessee," Biology. (May 2009 - Present).
Advised: Jennifer Snavely Hadley

Directed Individual, "Song alterations in response to urban noise by the eastern phoebe (Sayornis phoebe) in southeastern Indiana," Biology. (May 2009 - Present).
Advised: Travis Wood

Directed Individual, "Identification of molecular markers to distinguish eastern and western coyotes," Biology. (2013).
Advised: Jennifer Frisch

Directed Individual, "Off channel habitat selection of Piping Plovers and Least Terns throughout central Nebraska," Biology. (September 2012 - December 2013).
Advised: Staci Cahis

Master's Thesis Committee Chair, "Using lipid measures of spring migrating Northern Pintails (Anas acuta) to determine the success of current habitat management for food resources in the Rainwater Bain," Biology. (January 2011 - December 2013).
Advised: Dustin Casady

Master's Thesis Committee Member, Biology. (2011 - 2013).
Advised: Pepper May

Supervised Research - UGRD, "Spring body condition of Northern Pintals (Anas acuta) during migration in south central Nebraska," Biology. (2011 - 2013).
Advised: Jacob Newth

Supervised Research - GRAD, "The influence of predation risk on the foraging times of Korean Magpies," Biology. (May 2012 - August 2013).
Advised: Amanda Hampton

Directed Individual, "Visual and chemical prey location by Siren lacertina, the Greater Siren," Biology. (May 2012 - May 2013).
Advised: Russell Hendricks

Directed Individual, "Effects of handling time on corticosterone production in Red-winged Blackbird (Agelaius phoeniceus) nestlings," Biology. (2012).
Advised: Amanda Hagstrom

Directed Individual, "Levels of fecal corticosterone in migrating sandhill cranes (Grus canadensis) in central Nebraska," Biology. (2012).
Advised: Kaitlyn Bennett

Directed Individual, "Detection of atrazine in Red-winged Blackbird (Ageaius phoniceus) eggs," Biology. (2012).
Advised: Maria Rojas

Directed Individual, "Analysis of corticosterone levels between male and female Red-winged Blackbird nestlings," Biology. (2012).
Advised: Michele Sretch

Master's Thesis Committee Member, Biology. (2011 - 2012).
Advised: Anna Barber

Master's Thesis Committee Member, Biology. (2011 - 2012).
Advised: John Henderson

Master's Thesis Committee Chair, "Corticosterone levels in sub-adult and family groups of Whooping Cranes (Grus americana) in wintering locations of Lamar Peninsula, Texas," Biology. (2010 - 2012).
Advised: Mery Casady

Master's Thesis Committee Chair, "Rainwater basin seed availability, depletion, and waterfowl response during spring migration," Biology. (2009 - 2012).
Advised: Jeffery Drahota

Directed Individual, "Endocrine disruptor levels in U.S. and European insectivorous bats," Biology. (August 2010 - May 2012).
Advised: Mandy Guinn

Directed Individual, "Motor Vehicle Activity Influences on Clutch Size and Number of Eggs Hatched in the American Dipper (Cinclus mexicanus) Population of Spearfish Canyon," Biology. (August 2009 - May 2012).
Advised: Suzanne Hardaswick

Directed Individual, "Nest box design preference and nesting success of Eastern Bluebirds (Sialia sialis) in southeastern Indiana," Biology. (May 2009 - May 2012).
Advised: Peter Brown

Directed Individual, "Investigation of a variety of tools used in molecular biology research," Biology. (2011).
Advised: Alisa Elliot

Directed Individual, "Comparison of physiological condition for early and late fall migrant mallards in Nebraska," Biology. (2011).
Advised: Chandler Schmidt

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Mark Morten

Directed Individual, "Factors that affect nesting success of Dickcissles (Spiza americana) for actively managed and rested habitats in the central Platte River Valley, Nebraska," Biology. (August 2010 - August 2011).
Advised: Abdou KareKoona

Directed Individual, "A model for associated blood lead levels of Bald Eagles, the hunting season, and snowfall," Biology. (May 2010 - August 2011).
Advised: Ronald Lindblom

Directed Individual, "Influence of temperature on Northern Cardinal (Cardinalis cardinalis) foraging time at a feeder," Biology. (August 2010 - May 2011).
Advised: Andrea Sampson

Directed Individual, "Migratory bird use of Wetlands in the Rainwater Basin," Biology. (2010).
Advised: Brittany Blanco

Directed Individual, "Interbox proximity as a variable of nest site selection in the Eastern Bluebird, Sialia sialis," Biology. (May 2009 - August 2010).
Advised: Kerry Stevens

Scholarship

Intellectual Contributions

Duncan, G., Grandgenett, N., McClung, W., Reichart, L. M., Simon, D. M., Tapprich, W., Pauley, M. (2015). *Laboratories for Integrating Bioinformatics into the Life Sciences* (vol. 36). Tested Studies for Laboratory Teaching: Proceedings of ABLE.

Reichart, L. M., Anderholm, S., Munoz-Fuentes, V., Webster, M. S. (2010). Molecular identification of brood parasitic females reveals an opportunistic reproductive strategy in ruddy ducks. *Molecular Ecology, 19*, 401-413.

Presentations

Frisch, J. (Author & Presenter), Reichart, L. M. (Author), Springer, J. T. (Author). Annual Meeting of the Nebraska Academy of Sciences, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Nebraska Academy of Sciences, Nebraska Wesleyan, Lincoln, NE. (April 11, 2014).

Reichart, L. M. (Faculty Mentor), Fajardo, L. (Presenter). Annual Meeting of the Nebraska Academy of Sciences, "Preliminary Investigation of Plasma Lipid Metabolites for a Spring Migratory Bird in Central Nebraska," Lincoln, NE. (April 11, 2014).

Frisch, J. (Author & Presenter), Springer, J. T. (Author), Reichart, L. M. (Author). Annual Meeting of the Nebraska Chapter of the The Wildlife Society, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Nebraska Chapter of the The Wildlife Society, Kearney, NE. (February 2014).

Frisch, J. (Author & Presenter), Springer, J. T. (Author), Reichart, L. M. (Author). 74th Midwest Fish and Wildlife Conference, "Identification of Variable Microsatellite Loci for Coyote Populations in Nebraska," Midwest Fish and Wildlife Agencies, Kansas City, MO. (January 2014).

Moser, A. C. (Author & Presenter), Carlson, T. (Author), Roja, M. (Author), Reichart, L. M. (Author), Baillie, J. J. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Development of a Method to Measure Atrazine in Avian Eggs," American Chemical Society, Omaha, NE. (October 24, 2013).

Frisch, J. (Author & Presenter), Springer, J. T., Reichart, L. M. Student Research Day, "What's Staining the Coyote's Coat?," UNK, Kearney, NE. (April 2013).

Frisch, J. (Presenter), Springer, J. T., Reichart, L. M. Student Research Day, "What's Staining the Coyote's Coat?," UNK. (April 2013).

Reichart, L. M. (Author), Stretch, M. (Author & Presenter), Hagstrom, A. (Author). Nebraska Academy of Sciences, "Comparison of baseline levels of corticostrone between male and female nestling Red-winged Blackbirds (agelaius phoeniceus)," Lincoln, NE. (April 19, 2013).

Reichart, L. M. (Author), Stretch, M. (Author), Hagstrom, A. (Author & Presenter). National Conference on Undergraduate Research, "Effects of handling time on corticosterone production in red-winged blackbird (Agelaius phoeniceus) nestlings," La Crosse, WI. (April 11, 2013).

Reichart, L. M. (Author), Stretch, M. (Author & Presenter), Hagstrom, A. (Author). 125th Meeting of the Wilson Ornithological Society, "Comparison of baseline levels of corticosterone between male and female nestling Red-Winged Blackbirds (Agelius phoeniceus," Williamsburg, VA. (March 7, 2013).

Reichart, L. M. (Author), Stretch, M. (Author), Hagstrom, A. (Author & Presenter). 125th Meeting of the Wilson Ornithological Society, "Effects of handling time on corticosterone production in red-winged blackbird (Agelaius phoeniceus) nestlings.," Williamsburg, VA. (March 7, 2013).

Reichart, L. M. (Author), Casady, M. (Author & Presenter). 125th Metting of the Wilson Ornithological Society, "Corticosterone levels in sub-adult nad family groups of Whooping Cranes (rus americana) in wintering locations of Lamar Peninsula, Texas," Williamsburg, VA. (March 7, 2013).

Reichart, L. M. (Author & Presenter), Casady, D. (Author), Vrtiska, M. (Author). North American Duck Symposium, "Wintering body condition of spring migratory Northern Pintails in the Rainwater Basin," Memphis, TN. (January 27, 2013).

Reichart, L. M. (Author), Hagstrom, A. (Author & Presenter). UNK Student Research Day, "Effects of handling time on corticosterone production in red-winged blackbird (Agelaius phoeniceus) nestlings," Kearney, NE. (September 30, 2012).

Reichart, L. M. (Author & Presenter), Stretch, M. (Author), Hagstrom, A. (Author). 5th North American Ornithological Conference, "Baseline measurements of fecal corticosterone in nestling Red-winged Blackbirds," Vancouver, BC. (August 14, 2012).

Reichart, L. M. (Author), Stretch, M. (Author & Presenter). 11th Annual NE-INBRE Conference, "Comparison of fecal corticoserone between male and female Red-winged Blackbird nestlings," Grand Island, NE. (August 6, 2012).

Reichart, L. M. (Author), Stretch, M. (Author & Presenter), Hagstrom, A. (Author). Nebraska Academy of Sciences, "Validation of an enzyme immunoassay to measure fecal corticosterone in nestling red-winged blackbirds (Agelaius phoeniceus)," Lincoln, NE. (April 20, 2012).

Reichart, L. M. (Author), Moser, A. C. (Author), Rojas, M. (Author & Presenter). UNK Student Research Day, "Development of a method to measure atrazine in avian eggs," Kearney,NE. (April 20, 2012).

Reichart, L. M. (Author), Strecth, M. (Author), Hagstrom, A. (Author & Presenter). UNK Student Research Day, "Development of a method to measure baseline levels of corticosterone in nestling Red-winged blackbirds (Agelaius phoeniceus) nestlings," Kearney, NE. (April 20, 2012).

Reichart, L. M. (Author), Hagstrom, A. (Author & Presenter). UNK Student Research Day, "Baseline levels of corticosterone of Red-winged blackbirds (Agelaius phoeniceus) during development," Kearney, NE. (October 23, 2011).

Reichart, L. M. (Author), Rojas, M. (Author & Presenter), Moser, A. C. (Author). UNK Student Research Day, "Developing a method to measure atrazine in avian eggs.," Kearney,NE. (October 23, 2011).

Reichart, L. M. (Author), Frisch, J. D. (Author & Presenter), Springer, J. T. (Author). UNK Student Research Day, "Identification of molecular markers to distinguish eastern and western coyotes," Kearney,NE. (October 23, 2011).

Reichart, L. M. (Author), Hagstrom, A. (Author & Presenter). Annual NE-INBRE Conference, "Baseline levels of corticosterone of Red-winged Blackbirds (Agelaius phoeniceus) druing development," Grand Island,NE. (August 8, 2011).

Reichart, L. M. (Author), Drahota, J. (Author & Presenter), Vrtiska, M. (Author). Conserving the Future Wildlife Refuges nad the Next Generation Conference, "Mid-latitude Stopover Bioenergetics based on seed Availability Waterfowl density and depletion during spring migration," Madison, WI. (July 10, 2011).

Reichart, L. M. (Author), Drahota, J. (Author & Presenter), Vrtiska, M. (Author). 34th Annual Waterbird Society Meeting and 12th North American Crane Working Group Meeting, "Wetland Seed Availability, Seed depletion, and Waterfowl use in the Rainwater Basin During Spring Migration," Grand Island, NE. (March 13, 2011).

Reichart, L. M. (Author), Casady, M. (Author & Presenter). 34th Annual Waterbird Society Metting and 12th North American Crane Working Group Meeting, "Differences in habitat use by Whooping Cranes, Brus americana, observed in natural and urban areas of Texas druing winter 2009-2010," Grand Island, NE. (March 13, 2011).

Reichart, L. M. (Author), Casady, M. (Author & Presenter), Birnie, A. K. (Author), French, J. A. (Author). Joint Meeting of the Association of Field Ornithologists, Cooper Ornithological Society, and Wilson Ornithological Society, "Measuring fecal corticosterone in wild whooping crane (Grus americana)," Kearney, NE. (March 9, 2011).

Reichart, L. M. (Author), Drahota, J. (Author & Presenter), Vrtiska, M. (Author). Joint meeting of the Association of Field Ornithologists, Cooper Ornithological Society, and Wilson Ornithological Society, "Rainwater Basin Wetland Seed Availability in Annual and Perennial Plant Communities Prior to Spring Migration," Kearney,NE. (March 9, 2011).

Contracts, Fellowships, Grants, and Sponsored Research

Reichart, L. M. (Co-Principal), Pauley, M. (Principal), Duncan, G. (Co-Principal), Tapprich, W. (Co-Principal), Simon, D., "Integrating bioinformatics in the life sciences – Phase II," Grant, Sponsored by National Science Foundation, Federal, $87,930.95. (August 2011 - January 2015).

Reichart, L. M. (Co-Principal), Hendricks, R., "Foraging Cues of Siren lacertina, the Greater Siren.," Sponsored Research, Sponsored by University of Nebraska Kearney, $500.00. (2010 - 2013).

Reichart, L. M. (Principal), Hagstrom, A. (Co-Principal), "Baseline Measures of Corticosterone in Red-winged Blackbird nestlings," Grant, Sponsored by University of Nebraska Kearney, $250.00. (August 2012 - May 2013).

Reichart, L. M. (Principal), Hagstrom, A. (Co-Principal), "Painted Turtle DNA Analysis," Grant, Sponsored by University of Nebraska Kearney, $125.00. (January 2011 - May 2013).

Reichart, L. M. (Co-Principal), Lindblom, R. (Principal), "An Association Between Blood Lead Levels of Bald Eagles and the Hunting Season in the Upper Mississippi River Valley.," Sponsored Research, Sponsored by University of Nebraska Kearney, $301.00. (2011 - 2012).

Reichart, L. M. (Principal), Casady, M. (Co-Principal), "Foraging Behavior and Stress Physiology: Whooping Crane Response to Winter Habitat Alteration at Aransas National Refuge, Texas.," Sponsored Research, Sponsored by University of Nebraska Kearney, $750.00. (2010 - 2012).

Reichart, L. M. (Principal), Hagstrom, A. (Co-Principal), "Does handling time affect corticosterone levels in red-winged blackbird nestlings," Grant, Sponsored by University of Nebraska Kearney, $250.00. (May 2012 - September 2012).

Reichart, L. M. (Principal), Rojas, M. (Co-Principal), "Roundup Ready Eggs: Does glyphosate accumulate in eggs of birds nesting near agricultural crops in Nebraska?," Grant, Sponsored by University of Nebraska Kearney, $250.00. (May 2010 - August 2010).

Funded

Reichart, L. M. (Principal), Lewandowski, K. (Co-Principal), "Identification of genetic markers useful to measure genetic variability in two Painted Turtle populations," Grant, Sponsored by University of Nebraska Kearney, University of Nebraska at Kearney, $250.00. (August 2013 - Present).

Carlson, K. A. (Co-Principal), Turpen, J. (Principal), Shaffer, J. J. (Co-Principal), Simon, D. M. (Co-Principal), Reichart, L. M. (Co-Principal), Bourret, T. J. (Co-Principal), Panaitof, S. C. (Co-Principal), "Nebraska Training Network and Functional Genomics," Grant, Sponsored by INBRE Program of the National Center for Research Resources/NIH, Federal, $1,275,620.00. (April 2009 - March 2014).

Service

Academic Advising

Master's Thesis Committee Member, Biology. (2012 - Present).
Advised: Anthony Bridger

Master's Thesis Committee Member, Biology. (2012 - Present).
Advised: Aric Buerer

Master's Thesis Committee Chair, "Using lipid measures of spring migrating Northern Pintails (Anas acuta) to determine the success of current habitat management for food resources in the Rainwater Bain," Biology. (January

2011 - December 2013).
Advised: Dustin Casady

Master's Thesis Committee Member, Biology. (2011 - 2013).
Advised: Pepper May

Master's Thesis Committee Member, Biology. (2011 - 2012).
Advised: Anna Barber

Master's Thesis Committee Member, Biology. (2011 - 2012).
Advised: John Henderson

Master's Thesis Committee Chair, "Corticosterone levels in sub-adult and family groups of Whooping Cranes (Grus americana) in wintering locations of Lamar Peninsula, Texas," Biology. (2010 - 2012).
Advised: Mery Casady

Master's Thesis Committee Chair, "Rainwater basin seed availability, depletion, and waterfowl response during spring migration," Biology. (2009 - 2012).
Advised: Jeffery Drahota

Master's Thesis Committee Member, Biology. (2009 - 2011).
Advised: Mark Morten

Service – Department

Committee Chair, Undergraduate Research Commmittee. (2011 - Present).

Service – College

Committee Member, Honors Convocation Committee. (2012 - Present).

Service – University

Senator for Department of Biology, UNK Faculty Senate. (April 24, 2014 - Present).

Committee Member, Institutional Animal Care and Use Committee. (2013 - Present).

Committee Member, Undergraduate Research Council. (2010 - Present).

Faculty Advisor, UNK Biology Club. (2010 - Present).

Service – Public

Guest Speaker, Road Scholar Program, Gibbon and Kearney, NE. (March 2010 - March 2014).

Guest Speaker, Rowe Audubon Sancutary. (2010 - September 2013).

Program Organizer, Kearney Area Children's Museum, Kearney, NE. (July 2013).

Guest Speaker, Fort Kearny, Kearney, NE. (June 2013).

Guest Speaker, Audubon Society, Gibbon, NE. (February 17, 2013).

Other

Faculty Development Activities Attended

Conference Attendance, "Leveraging Uncertainty: Toward a New Generation of Undergraduate Research," Council for Undergraduate Research, Ewing Township, NJ, National. (2012).

Seminar, "Rainwater Basin Joint Venture 16th Annual Informational Seminar," Hastings, NE. (2012).

Workshop, "South Dakota Genomics Consortium," Integrated Microbial Genomes Annotation Collaboration Tool-kit (IMG-ACT), Chamberlain, SD, Regional. (November 2012).

Workshop, "Water For Food Institute Working Group," Lincoln, NE. (2010).

Meghan E. Sindelar
Biology
Email: SINDELARME@UNK.EDU

Teaching

Scheduled Teaching

Fall 2013

BIOL 301, Intro to Soils, 4 credit hours, 18 students enrolled, On Campus.

BIOL 301, Intro to Soils, 0 credit hours, 18 students enrolled, On Campus.

BIOL 830P, Special Topics in Biology, 3 credit hours, 13 students enrolled, Web Based.

Spring 2014

BIOL 380, Agronomy, 3 credit hours, 25 students enrolled, On Campus.

BIOL 813, Issues in Bioethics, 3 credit hours, 20 students enrolled, Web Based.

Fall 2014

BIOL 877, Writing in the Sciences, 2 credit hours, Web Based.

Richard L. Simonson
Biology
(308) 865-8943
Email: simonsonrl@unk.edu

Academic Degrees

MS, University of Nebraska at Kearney, 1999.

Major: Biology

Dissertation Title: Cloning and Sequencing of Glutamine Synthetase cDNAs from Celtis occidentals, Tribulus terrestris, and Juglans nigra

BA, Concordia College, 1995.

Major: Biology

Supporting Areas of Emphasis: Chemistry

Administrative Data – Permanent

Starting Rank: Lecturer

Start Date at University of Nebraska at Kearney: January 1, 2000

Date Attained Rank of Lecturer: January 1, 2000

Date Attained Rank of Senior Lecturer: January 1, 2004

Academic, Government, Military and Professional Positions

Research Specialist, University of North Dakota, Academic - Post-Secondary. (September 1, 1999 - December 20, 1999).

Teaching

Scheduled Teaching

Fall 2010

BIOL 109, Classroom Biology, 4 credit hours, 13 students enrolled, On Campus.

BIOL 109, Classroom Biology, 0 credit hours, 13 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 20 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 19 students enrolled, On Campus.

Spring 2011

BIOL 109, Classroom Biology, 4 credit hours, 7 students enrolled, On Campus.

BIOL 109, Classroom Biology, 0 credit hours, 8 students enrolled, On Campus.

BIOL 188, GS Portal, 3 credit hours, 13 students enrolled, On Campus.

Fall 2011

BIOL 188, GS Portal, 3 credit hours, 30 students enrolled, On Campus.

BIOL 211, Human Microbio, 0 credit hours, 20 students enrolled, On Campus.

Spring 2012

BIOL 103, Gen Biology, 4 credit hours, 143 students enrolled, On Campus.

BIOL 103, Gen Biology, 4 credit hours, 143 students enrolled, On Campus.

BIOL 188, GS Portal, 3 credit hours, 23 students enrolled, On Campus.

BIOL 811, Scientific Illustration, 3 credit hours, 26 students enrolled, Web Based.

Fall 2012

BIOL 188, GS Portal, 3 credit hours, 29 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 17 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 20 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 2 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 4 students enrolled, On Campus.
BIOL 388, GS Capstone, 3 credit hours, 8 students enrolled, On Campus.

Spring 2013

BIOL 188, GS Portal, 3 credit hours, 28 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 21 students enrolled, On Campus.
BIOL 226, Anat/Physio, 0 credit hours, 20 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 14 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 2 students enrolled, On Campus.
BIOL 388, GS Capstone, 3 credit hours, 24 students enrolled, On Campus.

Fall 2013

BIOL 188, GS Portal, 3 credit hours, 27 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 17 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 16 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 6 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 6 students enrolled, On Campus.
BIOL 388, GS Capstone, 3 credit hours, 21 students enrolled, On Campus.
BIOL 388H, GS Capstone, 3 credit hours, 1 students enrolled, On Campus.

Spring 2014

BIOL 188, GS Portal, 3 credit hours, 14 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 15 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 2 students enrolled, On Campus.
BIOL 388, GS Capstone, 3 credit hours, 20 students enrolled, On Campus.
BIOL 811, Scientific Illustration, 3 credit hours, 21 students enrolled, Web Based.

Fall 2014

BIOL 188, GS Portal, 3 credit hours, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, On Campus.
BIOL 388, GS Capstone, 3 credit hours, On Campus.

Directed Student Learning

Independent Study, "Directed Readings in Scientific Illustration," Biology. (September 15, 2014 - December 1, 2014).
Advised: Anna Maria Easley

Scholarship

Intellectual Contributions

Shaffer, J. J., Carlson, D. J., Simonson, R. L. (2012). *Introductory Microbiology* (2nd edition ed., pp. 1-79). Foster City, CA: Cafepress.com.

Presentations

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "Adobe Illustrator for the Scientific Illustrator: Symbols (full-day workshop)," Guild of Natural Science Illustrators, University of Colorado Boulder, Boulder, Colorado. (July 17, 2014).

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "Adobe Illustrator for the Scientific Illustrator: Custom Brushes (full-day workshop)," Guild of Natural Science Illustrators, College of the Atlantic, Bar Harbor, ME. (July 11, 2013).

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "Illustrator for the Artist," Guild of Natural Science Illustrators, College of the Atlantic, Bar Harbor, ME. (July 9, 2013).

Simonson, R. L. (Panelist). Guild of Natural Science Illustrators Annual Conference, "Successful Negotiations for Business Relationships," Guild of Natural Science Illustrators, Savannah College of Art and Design, Savannah, GA. (July 10, 2012).

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "The Importance of Vector Graphics," Guild of Natural Science Illustrators, The Evergreen State College, Olympia, WA. (July 12, 2011).

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "Digital Drawing with Adobe Illustrator (full-day workshop)," Guild of Natural Science Illustrators, North Carolina State University, Raleigh, NC. (July 15, 2010).

Simonson, R. L. (Presenter). Guild of Natural Science Illustrators Annual Conference, "An Introduction to Sketchbook Pro," Guild of Natural Science Illustrators, North Carolina State University, Raleigh, NC. (July 14, 2010).

Service

Professional Memberships

Vice-President, Guild of Natural Science Illustrators - Great Plains Chapter. (January 1, 2010 - Present).

Education Committee Member, Guild of Natural Science Illustrators. (May 1, 2003 - Present).

Academic Advising

2012-2013

Undergraduate Students Advised: 1

Graduate Students Advised: 0

Service – Department

Committee Member, Sustainability Search Committee. (August 28, 2014 - Present).

Committee Member, Enhancement Committee. (January 1, 2011 - Present).

Service – University

Group Leader for a nine-day educational study tour of Costa Rica. (May 20, 2014 - May 28, 2014).

Service – Public

Program Organizer, Guild of Natural Science Illustrators - Great Plains Chapter, Lincoln, NE. (May 18, 2013).

Dr. Annette C. Moser
Chemistry
(308) 865-8802
Email: moserac@unk.edu

Academic Degrees

BS, University of Nebraska at Kearney, 2000.

Major: Chemistry Comprehensive

Supporting Areas of Emphasis: Physics Minor

Dissertation Title: Separation of Acetanilide Herbicdes and their Metabolites by SPE: Sample Preparation for Chiral Analysis

PhD, University of Nebraska-Lincoln.

Major: Analytical Chemistry

Dissertation Title: Development and Use of New Affinity Ligands for Pharmaceutical Analysis

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 14, 2006

Date Attained Rank of Assistant Professor: August 14, 2006

Date Attained Rank of Associate Professor: August 13, 2012

Tenure Decision Date: August 2013

Awards and Honors

Don Fox Chair, UNK Chemistry Department, Teaching, Department. (September 2011).

James W. and Carolyn L. Taylor MUACC Travel Award, Midwest Universities Analytical Chemistry Conference, Scholarship/Research, Regional. (September 2011).

Don Fox Chair, UNK Chemistry Department, Teaching, Department. (September 2010).

Teaching

Scheduled Teaching

Fall 2010

CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.

CHEM 160L, Gen Chem Lab, 1 credit hours, 23 students enrolled, On Campus.

CHEM 301, Analytical Chemistry, 3 credit hours, 14 students enrolled, On Campus.

CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 13 students enrolled, On Campus.

Spring 2011

CHEM 188, GS Portal, 3 credit hours, 4 students enrolled, On Campus.

CHEM 301, Analytical Chemistry, 3 credit hours, 24 students enrolled, On Campus.

CHEM 301H, Analytical Chemistry, 3 credit hours, 1 students enrolled, On Campus.

CHEM 475, Instrumental Analysis, 3 credit hours, 5 students enrolled, On Campus.

CHEM 475H, Instrumental Analysis, 3 credit hours, 1 students enrolled, On Campus.

CHEM 475L, Instrumental Analysis Lab, 1 credit hours, 6 students enrolled, On Campus.

Fall 2011

CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 301, Analytical Chemistry, 3 credit hours, 10 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 10 students enrolled, On Campus.
CHEM 469, Senior Seminar in Chemistry, 1 credit hours, 10 students enrolled, On Campus.

Spring 2012
CHEM 301, Analytical Chemistry, 3 credit hours, 21 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 11 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 10 students enrolled, On Campus.

Fall 2012
CHEM 160, General Chem, 3 credit hours, 45 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 475, Instrumental Analysis, 3 credit hours, 7 students enrolled, On Campus.
CHEM 475L, Instrumental Analysis Lab, 1 credit hours, 7 students enrolled, On Campus.

Spring 2013
CHEM 161, General Chem, 3 credit hours, 38 students enrolled, On Campus.
CHEM 301, Analytical Chemistry, 3 credit hours, 25 students enrolled, On Campus.
CHEM 301H, Analytical Chemistry, 3 credit hours, 3 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 16 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 12 students enrolled, On Campus.

Fall 2013
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 21 students enrolled, On Campus.
CHEM 369, Junior Seminar in Chemistry, 1 credit hours, 12 students enrolled, On Campus.
CHEM 864, Analytical Chem for HS Teacher, 3 credit hours, 9 students enrolled, Web Based.

Spring 2014
CHEM 145, Intro Chem, 0 credit hours, 22 students enrolled, On Campus.
CHEM 301, Analytical Chemistry, 3 credit hours, 23 students enrolled, On Campus.
CHEM 301H, Analytical Chemistry, 3 credit hours, 3 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 14 students enrolled, On Campus.
CHEM 301L, Analytical Chemistry Lab, 1 credit hours, 13 students enrolled, On Campus.

Fall 2014
CHEM 160, General Chem, 3 credit hours, On Campus.
CHEM 469, Senior Seminar in Chemistry, 1 credit hours, On Campus.
CHEM 475, Instrumental Analysis, 3 credit hours, On Campus.
CHEM 475L, Instrumental Analysis Lab, 1 credit hours, On Campus.

Directed Student Learning

Supervised Research - UGRD. (February 2013 - Present).
Advised: Alyssa Blair

Supervised Research - UGRD. (February 2013 - Present).
Advised: Anthony Donovan

Supervised Research - UGRD. (January 2011 - May 2013).
Advised: Corey Willicott

Supervised Research - UGRD. (February 2013 - April 2013).
Advised: Ashleigh Teten

Supervised Research - UGRD. (February 2013 - April 2013).
Advised: Lauren Reiman

Supervised Research - UGRD. (February 2013 - April 2013).
Advised: Stephanie Anderson

Thompson Scholars. (October 2012 - April 2013).
Advised: Cole Wellnitz

Thompson Scholars. (January 2012 - May 2012).
Advised: Jamie Kirwan

Supervised Research - UGRD. (February 2011 - May 2012).
Advised: Jessica Baillie

Supervised Research - UGRD. (February 2011 - May 2012).
Advised: Maria Rojas

Supervised Research - UGRD. (February 2009 - May 2012).
Advised: Taylor Carlson

Supervised Research - UGRD. (June 2010 - May 2011).
Advised: Bobbi Arnold

(February 2011 - April 2011).
Advised: Rafaila Ramirez

Chemistry. (January 2010 - May 2010).
Advised: Jared Loschen

Scholarship

Intellectual Contributions

Moser, A. C., Willicott, C. W., Hage, H. S. (2014). Clinical Applications of Capillary Electrophoresis-Based Immunoassays. *Electrophoresis, 35*, 937-955.

Carlson, C., Moser, A. C. (2014). General Principles of Immunoassays. *Novel Approaches in Immunoassays* (vol. Chapter 1). Future Science Group.

Moser, A. C., White, B., Kovacs, F. A. (2014). Measuring Binding Constants of His-Tagged Proteins using Affinity Chromatography and Ni-NTA immobilized Enzymes. In Nikolaos E. Labrou (Ed.), *Methods in Molecular Biology* (vol. Chapter 30). Humana Press.

Magdeldin, S., Moser, A. C. (2012). Affinity Chromatography: Principles, methods and applications. In Sameh Magdeldin (Ed.), *Affinity Chromatography* (pp. 1-27). New York: InTech. www.intechopen.com/books/affinity-chromatography/affinity-chromatography-principles-and-applications

Pfaunmiller, E., Moser, A. C., Hage, D. S. (2012). Biointeraction Analysis of Immobilized Antibodies and Related Agents by High-Performance Immunoaffinity Chromatography. *Methods, 56*, 130-135.

Presentations

Willicott, C. (Author & Presenter), Moser, A. C. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Determination of Atrazine in Soil Samples by GC-MS," American Chemical Society, Omaha, NE. (October 25, 2013).

Willicott, C. (Author & Presenter), Moser, A. C. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Determination of Atrazine in Water Samples by GC-MS," American Chemical Society, Omaha, NE. (October 25, 2013).

Moser, A. C. (Author & Presenter), Carlson, T. (Author), Roja, M. (Author), Reichart, L. M. (Author), Baillie, J. J. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Development of a Method to Measure Atrazine in Avian Eggs," American Chemical Society, Omaha, NE. (October 24, 2013).

Willicott, C. (Author & Presenter), Moser, A. C. (Author). 133rd Nebraska Academy of Sciences Annual Meeting, "Determination of Atrazine in Water and Soil Samples by GC-MS," Nebraska Academy of Sciences, Lincoln, NE. (April 19, 2013).

Willicott, C. (Author & Presenter), Moser, A. C. (Author). 2013 UNK Student Research Day, "Determination of Atrazine in Water Samples by GC-MS," UNK, Kearney, NE. (April 4, 2013).

Willicott, C. (Author & Presenter), Moser, A. C. (Author). Fall Student Research Symposium, "Determination of Herbicides in Soil Samples Using Gas Chromatography-Mass Spectrometry," UNK, Kearney, NE. (September 30, 2012).

Willicott, C. (Author & Presenter), Moser, A. C. (Author). 2012 UNK Student Research Day, "Determination of Herbicides in Water Samples Using Gas Chromatography-Mass Spectrometry," UNK, Kearney, NE. (April 20, 2012).

Rojas, M. (Author & Presenter), Carlson, T. (Author), Moser, A. C. (Author). 2012 UNK Student Research Day, "Developing a Method to Measure Atrazine in Avian Eggs," UNK, Kearney, NE. (April 20, 2012).

Carlson, T. (Author & Presenter), Rojas, M. (Author), Moser, A. C. (Author). 2012 UNK Student Research Day, "Development of a Chromatographic Method to Quantify Concentrations of Atrazine in Avian Egg Samples," UNK, Kearney, NE. (April 20, 2012).

Reichart, L. M. (Author), Moser, A. C. (Author), Rojas, M. (Author & Presenter). UNK Student Research Day, "Development of a method to measure atrazine in avian eggs," Kearney,NE. (April 20, 2012).

Reichart, L. M. (Author), Rojas, M. (Author & Presenter), Moser, A. C. (Author). UNK Student Research Day, "Developing a method to measure atrazine in avian eggs.," Kearney,NE. (October 23, 2011).

Kovacs, F. A. (Author), White, B. (Author & Presenter), Moser, A. C. (Author). 46th Midwest/39th Great Lakes Joint Regional ACS, "Use of chromatography to characterize a substrate binding constant for a His-tag immobilized ascorbate peroxidase," American Chemical Society, St Louis, MO. (October 20, 2011).

White, B. (Author & Presenter), Moser, A. C. (Author), Kovacs, F. A. (Author). Nebraska Academy of Sciences Annual Meeting, "Use of chromatography to characterize a substrate binding constant for a His-tag immobilized enzyme," Nebraska Academy of Sciences, Lincoln, NE. (March 25, 2011).

Contracts, Fellowships, Grants, and Sponsored Research

Not Funded

Moser, A. C., Grant, Sponsored by NE-INBRE, State, $176,004.00. (May 2014 - April 2017).

Service

Professional Memberships

American Chemical Society. (October 2006 - Present).

Nebraska Academy of Sciences. (March 2005 - Present).

Academic Advising

2013-2014

Undergraduate Students Advised: 4

Service – Department

Committee Member, Outreach. (August 2011 - Present).

GC-MS equipment maintanence. (March 2011 - Present).

HPLC maintenence. (August 2006 - Present).

Committee Chair, Carla Kegley-Owen Annual Review. (January 2014 - March 2015).

Committee Member, Allen Thomas Annual Review. (August 2014 - January 2015).

Committee Member, Hector Palencia - Tenure Review Committee. (October 2014 - November 2014).

General Chemistry I Lab Coordinator. (June 2013 - May 2014).

Faculty Advisor, Transfer student advising. (April 25, 2014).

Committee Member, Science Day at UNK. (March 2014).

Committee Member, Faculty Search. (August 2013 - December 2013).

Committee Member, Distance Education Workstation. (January 2013 - May 2013).

Committee Member, Science Day at UNK. (March 2013).

Committee Member, Faculty Search. (January 2013 - March 2013).

Committee Member, Faculty Search. (August 2012 - February 2013).

General Chemistry I Lab Coordinator. (July 2010 - May 2012).

Seminar Coordinator. (May 2011 - December 2011).

Service – College

Committee Member, Oversight. (August 2012 - Present).

Committee Member, Honors Convocation. (February 2010 - Present).

Committee Chair, Annual Review - Mariana Lazarova. (December 2014 - January 2015).

Committee Member, Jacob Weiss Tenure Committee. (November 2014 - January 2015).

Helped with BHS tours for prospective students, Health Careers Fair Volunteer. (October 8, 2014).

Committee Member, Master's Thesis - Robert J. Pavlovsky. (August 2011 - May 2014).

Committee Member, Annual Review - Jose Menawerth. (January 2014 - February 2014).

Committee Member, Annual Review - Ken Trantham. (January 2014 - February 2014).

Committee Member, Annual Review - Lee Powell. (January 2014 - February 2014).

Committee Member, Annual Review - Tim Reece. (January 2014 - February 2014).

Committee Member, Annual Review - Laura Wessels. (November 2013 - December 2013).

Helped with BHS tours for prospective students, Health Careers Fair Volunteer. (October 9, 2013).

Committee Member, Master's Thesis - Pepper May. (August 2011 - May 2013).

Committee Member, Annual Review - Laura Wessels. (January 2013 - February 2013).

Committee Member, Annual Review - Lee Powell. (January 2013 - February 2013).

Committee Member, Annual Review - Tim Reece. (October 2012 - November 2012).

Committee Member, Physics Faculty Search. (October 2011 - March 2012).

Committee Member, Oversight. (August 2008 - July 2011).

Committee Chair, Oversight. (August 2009 - July 2010).

Service – University

Committee Chair, General Studies Assessment Ad-Hoc. (October 2013 - Present).

Committee Member, Keareny Health Opportunities (KHOP) Selection Committee. (December 2012 - Present).

Helped organize and direct chemistry activities for children's 3-day visit, UNK Summer Fun Club for Child Development Center. (July 23, 2014 - July 25, 2014).

Committee Member, Faculty Senate. (April 2013 - April 2014).

Committee Member, Graduate Council Committee II (Academic Affairs). (August 2011 - April 2014).

Committee Member, Graduate Council. (August 2011 - April 2014).

Committee Chair, Faculty Senate Student Affairs. (May 2013 - August 2013).

Committee Member, General Studies Assessment Ad-Hoc. (August 2012 - December 2012).

Faculty Advisor, Preparing Future Faculty Mentor - Wantanee Sittiwong. (August 2012 - November 2012).

Committee Member, Undergraduate Research Council. (August 2009 - May 2012).

Committee Member, Kearney Health Opportunities (KHOP) Selection Committee. (December 2011).

Service – Professional

Member, American Chemical Society. (October 2006 - Present).

Member, Nebraska Academy of Sciences. (March 2005 - Present).

Reviewer, Journal Article, Journal of Chromatography A. (December 2014).

Reviewer, Journal Article, Analytical Methods. (October 2013).

Reviewer, Journal Article, Analytical Methods. (March 2013).

Session Chair, American Chemical Society - Midwest Regional Meeting. (2012).

Reviewer, Journal Article, Analytical Methods. (November 2012).

Reviewer, Journal Article, Analytical Methods. (July 2012).

Reviewer, Journal Article, Analytical Methods. (April 2012).

Conference-Related, 2011 ACS Midwest Regional Meeting Undergraduate Program Reviewer. (2011).

Reviewer, Journal Article, Analytical Methods. (November 2011).

Reviewer, Grant Proposal, North Carolina Biotechnology Center MRG application. (August 2011).

Reviewer, Journal Article, Analytical Chimica Acta. (May 2011).

Reviewer, Journal Article, Chromatographia. (April 2011).

Reviewer, Grant Proposal, NSERC Strategic Project grant application. (August 2010).

Reviewer, Journal Article, Chromatographia. (February 2010).

Other

Faculty Development Activities Attended

Continuing Education Program, "Blackboard Collaborator Training," UNK. (January 15, 2013).

Workshop, "University of Nebraska Graduate College Workshop," University of Nebraska, Omaha, NE. (November 2, 2012).

Continuing Education Program, "Summer Institute for Online Teaching," UNK & UNL. (May 11, 2011 - June 15, 2011).

Continuing Education Program, "Summer Institute for Online Teaching Blackboard Training," UNK & UNL. (May 11, 2011 - June 15, 2011).

Professor Christopher L. Exstrom

Chemistry

(308) 865-8565

Email: exstromc@unk.edu

Academic Degrees

PhD, University of Minnesota, 1995.

Major: Inorganic Chemistry

Supporting Areas of Emphasis: Analytical Chemistry

Dissertation Title: Structural Characterization of Iridium 1,8-Diisocyanomenthane Complexes and the Effects of Guest Molecule Inclusion on the Structure and Spectroscopy of Organometallic Stacking Complexes

BA, Illinois Wesleyan University, 1990.

Major: Chemistry

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 19, 1996

Date Attained Rank of Associate Professor: August 14, 2000

Date Attained Rank of Full Professor: August 14, 2006

Tenure Decision Date: August 1, 2000

Academic, Government, Military and Professional Positions

Visiting Assistant Professor of Chemistry, Kenyon College, Academic - Post-Secondary. (August 15, 1995 - July 31, 1996).

Awards and Honors

Leland Holdt/Security Mutual Life Insurance Company Distinguished Faculty Award, Security Mutual Life Insurance Company, University. (December 15, 2010).

Teaching

Scheduled Teaching

Fall 2010

CHEM 160, General Chem, 3 credit hours, 47 students enrolled, On Campus.

CHEM 369, Junior Seminar In Chemistry, 1 credit hours, 5 students enrolled, On Campus.

CHEM 469, Senior Seminar In Chemistry, 1 credit hours, 7 students enrolled, On Campus.

CHEM 820P, Inorg Chem I-Hs Tchr, 3 credit hours, 10 students enrolled, Web Based.

Spring 2011

CHEM 161, General Chem, 3 credit hours, 44 students enrolled, On Campus.

CHEM 161, General Chem, 3 credit hours, 44 students enrolled, On Campus.

CHEM 161L, Gen Chem Lab, 1 credit hours, 21 students enrolled, On Campus.

CHEM 161L, Gen Chem Lab, 1 credit hours, 19 students enrolled, On Campus.

Fall 2011

CHEM 160, General Chem, 3 credit hours, 48 students enrolled, On Campus.

CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 430, Inorganic Chemistry, 3 credit hours, 7 students enrolled, On Campus.
CHEM 430H, Inorganic Chemistry, 3 credit hours, 4 students enrolled, On Campus.
CHEM 430L, Inorganic Chemistry Lab, 1 credit hours, 11 students enrolled, On Campus.

Spring 2012
CHEM 161L, Gen Chem Lab, 1 credit hours, 17 students enrolled, On Campus.
CHEM 440, Materials Chemistry, 3 credit hours, 4 students enrolled, On Campus.
CHEM 821P, Inorganic Chem II-HS Tchrs, 3 credit hours, 3 students enrolled, Web Based.

Fall 2012
CHEM 160L, Gen Chem Lab, 1 credit hours, 24 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 20 students enrolled, On Campus.
CHEM 269, Sophomore Seminar in Chemistry, 1 credit hours, 24 students enrolled, On Campus.
CHEM 430, Inorganic Chemistry, 3 credit hours, 6 students enrolled, On Campus.
CHEM 430L, Inorganic Chemistry Lab, 1 credit hours, 6 students enrolled, On Campus.

Spring 2013
CHEM 161L, Gen Chem Lab, 1 credit hours, 16 students enrolled, On Campus.
CHEM 300, Environmental Chemistry, 3 credit hours, 9 students enrolled, On Campus.
CHEM 820P, Inorganic Chem I-HS Tchr, 3 credit hours, 8 students enrolled, Web Based.

Fall 2013
CHEM 160, General Chem, 3 credit hours, 36 students enrolled, On Campus.
CHEM 430, Inorganic Chemistry, 3 credit hours, 7 students enrolled, On Campus.
CHEM 430L, Inorganic Chemistry Lab, 1 credit hours, 7 students enrolled, On Campus.
CHEM 469, Senior Seminar in Chemistry, 1 credit hours, 5 students enrolled, On Campus.

Spring 2014
CHEM 161L, Gen Chem Lab, 1 credit hours, 15 students enrolled, On Campus.
CHEM 440, Materials Chemistry, 3 credit hours, 4 students enrolled, On Campus.
CHEM 821, Inorganic Chem II-HS Tchrs, 3 credit hours, 8 students enrolled, Web Based.

Summer 2014
CHEM 810, Environmental Chem - HS Tchr, 3 credit hours, 9 students enrolled, Web Based.

Fall 2014
CHEM 145, Intro Chem, 4 credit hours, On Campus.
CHEM 145, Intro Chem, 0 credit hours, On Campus.
CHEM 145, Intro Chem, 0 credit hours, On Campus.
CHEM 145, Intro Chem, 0 credit hours, On Campus.

Directed Student Learning

Supervised Research - UGRD. (January 2014 - Present).
Advised: Jessica Blum

Supervised Research - UGRD. (January 2014 - Present).
Advised: Miranda Neumann

Supervised Research - UGRD, "Iron Pyrite Nanoparticle Formation and Growth Mechanistic Studies." (January 2013 - Present).
Advised: Aspen Clements

Supervised Research - UGRD, "Iron Pyrite Nanoparticle Formation and Growth Mechanistic Studies." (January 2013 - Present).
Advised: Michael Hanrahan

Supervised Research - UGRD, "Studies of Au Nanoparticle Films as Biosensors." (May 2012 - Present).
Advised: Rebecca Svatora

Supervised Research - UGRD, "Synthesis of Novel Branched Au Nanoparticles for Biosensor Applications." (January 2012 - Present).
Advised: Bethany Lueck

Supervised Research - UGRD, Chemistry. (January 2014 - August 2014).
Advised: Joshua Edgar

Supervised Research - UGRD. (January 2014 - April 2014).
Advised: Mallory Breemes

Supervised Research - UGRD. (January 2014 - April 2014).
Advised: Mariana Bartlotti Garcia

Supervised Research - UGRD. (January 2014 - April 2014).
Advised: Shane Swanson

Supervised Research - UGRD, "Synthesis and Coating of Novel Branched Au Nanoparticles for Biosensor Applications." (January 2013 - July 2013).
Advised: Zack Colgrove

Supervised Research - UGRD, "Nanocrystalline Iron-Zinc Pyrite Thermal and ICP-OES Characterization." (August 2012 - May 2013).
Advised: Bjorn Lund

Supervised Research - UGRD, "Preparation and Studies of Nanocrystalline FeS2 and SnS2." (May 2009 - May 2013).
Advised: Thomas Webber

Supervised Research - UGRD, "Synthesis of Novel Branched Au Nanoparticles for Biosensor Applications." (January 2013 - April 2013).
Advised: Daniel Connor

Supervised Research - UGRD, "Synthesis of Novel Branched Au Nanoparticles for Biosensor Applications." (January 2013 - April 2013).
Advised: Molly O'Brien

Supervised Research - UGRD, "Synthesis of Novel Branched Au Nanoparticles for Biosensor Applications." (January 2013 - April 2013).
Advised: Ryan Matzen

Supervised Research - UGRD, "Studies of Au Nanoparticle Binding Interactions to Crystalline and Glassy Substrates." (August 2012 - December 2012).
Advised: Xiaojun Liu

Supervised Research - UGRD, "Development of Controlled Syntheses of Branched Au Nanoparticles." (August 2011 - August 2012).
Advised: Kirsten Lipps

Supervised Research - UGRD, "Spray Deposition of Selenium for Solar Cell Fabrication." (May 2010 - May 2012).
Advised: Nathan Hoffman

Supervised Research - UGRD, "CuInS2 Preparation via Aqueous Solution-based Methods; Preparation and Studies of Nanocrystalline FeS2 and SnS2." (January 2009 - May 2012).
Advised: Matthew Jensen

Supervised Research - UGRD, "Fabrication and Characterization of CIGS Thin Films." (January 2011 - December 2011).
Advised: Jesse Lange

Supervised Research - UGRD. (January 2008 - December 2011).
Advised: Laura Slaymaker

Supervised Research - UGRD. (January 2008 - May 2011).
Advised: David Paprocki

Supervised Research - UGRD. (January 2008 - May 2011).
Advised: Megan Schliefert

Supervised Research - UGRD. (January 2007 - May 2011).
Advised: Matthew Ingersoll

Thompson Scholars, "Preparation and Studies of Nanocrystalline FeS2 as a Solar Cell Absorber." (January 2011 - April 2011).
Advised: Loany Fajardo

Supervised Research - UGRD, "CuInSe2 Preparation via Se reduction by KBH4." (May 2010 - August 2010).
Advised: Britni Hervert

Supervised Research - UGRD, "ICP-OES Analyses of Sulfur from Semiconductor Materials." (January 2010 - August 2010).
Advised: Maurice Chessmore

Supervised Research - UGRD. (January 2006 - May 2010).
Advised: Ashley Vandeventer

Scholarship

Intellectual Contributions

Mao, B., Dong, Q., Exstrom, C., Huang, J. (2014). Surface Thermal Stability of Iron Pyrite Nanocrystals: Role of Capping Ligands. *Thin Solid Films, 562*, 361-366.

Olejnicek, J., Hubicka, Z., Ksirova, P., Kment, S., Brunclikova, M., Kohout, M., Cada, M., Darveau, S. A., Exstrom, C. (2013). Preparation of CIGS Thin Films by HiPIMS or DC Sputtering and Various Selenization Processes. *Journal of Advanced Oxidation Technologies*.

Mao, B., Dong, Q., Xiao, Z., Exstrom, C., Darveau, S. A., Webber, T. E., Lund, B. D., Huang, J. (2013). Zinc Alloyed Iron Pyrite Nanocrystals for Band Gap Broadening. *Journal of Materials Chemistry A*.

Hunter, B. M., Villahermosa, R. M., Exstrom, C., Hill, M. G., Mann, K. R., Gray, H. B. (2012). M-M Bond-Stretching Energy Landscapes for M2(dimen)42+ (M = Rh, Ir; dimen = 1.8-dissocyanomenthane) Complexes. *Inorganic Chemistry, 51*, 6898-6905.

Bi, Y., Yuan, Y., Exstrom, C., Darveau, S. A., Huang, J. (2011). Air Sensitive, Photosensitive, Phase Pure Iron Pyrite Nanocrystal Thin Films for Photovoltaic Application. *Nano Letters, 11*, 4953-4957.

Olejníček, J., Slaymaker, L. E., Darveau, S. A., Exstrom, C., Kment, S., Prabukanthan, P., Soukup, R. J., Ianno, N. J. (2011). CuIn1-xAlxS2 Thin Films Prepared by Sulfurization of Metallic Precursors. *Journal of Alloys and Compounds, 509*, 10020-10024.

Olejníček, J., Kamler, C. A., Darveau, S. A., Exstrom, C., Slaymaker, L. E., Vandeventer, A. R., Ianno, N. J., Soukup, R. J. (2011). Formation of CuIn1-xAlxSe2 Thin Films Studied by Raman Scattering. *Thin Solid Films, 519*, 5329-5334.

Slaymaker, L. E., Hoffman, N. M., Ingersoll, M. A., Jensen, M. R., Olejníček, J., Darveau, S. A., Exstrom, C., Soukup, R. J., Ianno, N. J., Sarkar, A., Kment, S. (2011). Properties of CuIn1-xGaxSe2 Films Prepared by the Rapid Thermal

Annealing of Spray-deposited CuIn1-xGaxS2 and Se. *Materials Research Society Symposium Proceedings, 2011*, 1324.

Yao, J., Takas, N. J., Schliefert, M. L., Paprocki, D. S., Blanchard, P.E.R, Mar, A., Exstrom, C., Darveau, S. A., Poudeu, P.F.P., Aitken, J. A. (2011). Thermoelectric Properties of p-type CuInSe2 Chalcopyrites Enhanced by Introduction of Manganese. *Physical Review B, 84*, 075203.

Olejnicek, J., Kamler, C. A., Mirasano, A., Martinez-Skinner, A., Ingersoll, M. A., Exstrom, C., Darveau, S. A., Huguenin-Love, J., Diaz, M., Ianno, N. J., Soukup, R. J. (2010). A Non-vacuum Process for Preparing Nanocrystalline CuIn1-xGaxSe2 Materials Involving an Open-air Solvothermal Reaction. *Solar Energy Materials and Solar Cells, 94*, 8-11.

Patents

Exstrom, C., Darveau, S. A., Hanrahan, M. P., Edgar, J. S. "Non-vacuum Method for Preparing Thin-film Tungsten Selenide Involving a Mild-temperature Solvothermal Process." (Submitted: July 30, 2014, Application: November 7, 2014).

Exstrom, C., Huang, J., Mao, B. "Synthesis of Air-stable Pyrite Nanocrystals for Photovoltaic Application." (Submitted: February 2012, Application: November 2012).

Presentations

Kounovsky-Shafer, K. L. (Author & Presenter), Blum, J. R. (Author), Svatora, R. L. (Author), Darveau, S. A. (Author), Exstrom, C. ACS National Meeting, "Combining microfluidics and gold nanoparticle sensing toward the development of surface plasmon resonance detection of viruses in polydimethylsiloxane microchannels," Denver, CO. (March 2015).

Blum, J. R. (Author & Presenter), Svatora, R. L. (Author), Kounovsky-Shafer, K., Darveau, S. A. (Author), Exstrom, C. (Author). 49th Midwest Regional Meeting of the American Chemical Society, "Immobilization and Functional Coating of Gold Nanoparticles in a Polydimethylsiloxane Microfluidic Device Structure," American Chemical Society, Columbia, MO. (November 13, 2014).

Neumann, M. M. (Author & Presenter), Darveau, S. A. (Author), Exstrom, C. (Author). 49th Midwest Regional Meeting of the American Chemical Society, "Anisotropic Gold Nanoparticles Prepared by the Reduction of HAuCl4 with HEPES: Optimization of Synthesis Conditions and Shape Stabilization by Protein A," American Chemical Society, Columbia, MO. (November 12, 2014).

Blum, J. (Author & Presenter), Svatora, R. (Author), Kounovsky-Shafer, K. (Faculty Mentor), Exstrom, C. (Faculty Mentor), Darveau, S. A. (Faculty Mentor). Nanohybrid Meeting, "Immobilization and Functional Coating of Gold Nanoparticles in a Polydimethylsiloxane Microfluidic Device Structure," University of Nebraska - Lincoln, Lincoln. (August 2014).

Lueck, B. A. (Author & Presenter), Exstrom, C. (Author), Darveau, S. A. (Author). 48th Midwest Regional Meeting of the American Chemical Society, "Kinetics of Gold Nanoparticle Synthesis Monitored by Raman Spectroscopy," American Chemical Society, Springfield, MO. (October 18, 2013).

Svatora, R. L. (Author & Presenter), Darveau, S. A. (Author), Exstrom, C. (Author). 48th Midwest Regional Meeting of the American Chemical Society, "Films of Anisotropic Gold Nanoparticles Deposited using Chemisorption- and Physisorption-based Methods," American Chemical Society, Springfield, MO. (October 16, 2013).

Exstrom, C. (Author & Presenter), Lueck, B. A. (Author), Clark, S. L. (Author), Gydesen, T. V. (Author), Neville, C. R. (Author), Darveau, S. A. (Author). 48th Midwest Regional Meeting of the American Chemical Society, "Halide Ion Influence on the Pathway of Reductive Gold Nanoparticle Formation in Aqueous Solution," American Chemical Society, Springfield, MO. (October 16, 2013).

Hanrahan, M. P. (Author & Presenter), Clements, A. R. (Author & Presenter), Darveau, S. A. (Author), Exstrom, C. (Author). 48th Midwest Regional Meeting of the American Chemical Society, "Nanocrystalline FeS2 Prepared from Iron(III) N,N-diethyldithiocarbamate," American Chemical Society, Springfield, MO. (October 16, 2013).

Exstrom, C. (Author & Presenter), Darveau, S. A. (Author & Presenter). "Preparation and Studies of Gold Nanoparticles Prepared via Oxalate Reduction of HAuCl4," Center for Nanohybrid Functional Materials (University of Nebraska-Lincoln), Lincoln, NE. (October 1, 2013).

Svatora, R. L. (Author & Presenter), Exstrom, C. (Author), Darveau, S. A. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Effects of aminopropyltrimethoxysilane on gold nanoparticle aggregation and binding to crystalline and glass substrates," ACS, Omaha, NE. (October 21, 2012).

Lueck, B. A. (Author & Presenter), Exstrom, C. (Author), Darveau, S. A. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Effects of pH in the synthesis of branched gold nanoparticles in water/methanol solutions," ACS, Omaha, NE. (October 21, 2012).

Lipps, K. M. (Author & Presenter), Lueck, B. A. (Author), Svatora, R. L. (Author), Exstrom, C. (Author), Darveau, S. A. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Preparation of gold nanoparticles via oxalate reduction of HAuCl4 without the presence of polymeric stabilizing agents," ACS, Omaha, NE. (October 21, 2012).

Webber, T. E. (Author & Presenter), Exstrom, C. (Author), Darveau, S. A. (Author). 47th Midwest Regional Meeting of the American Chemical Society, "Studies of iron depletion in the solvothermal preparation of nanocrystalline pyrite FeS2 in oleylamine," ACS, Omaha, NE. (October 21, 2012).

Exstrom, C. (Author & Presenter). "Earth-Abundant Sulfides as Nanocrystal-based Solar Cell Materials," Duquesne University, Pittsburgh, PA. (March 30, 2012).

Exstrom, C. (Author & Presenter), Darveau, S. A. (Author & Presenter), Webber, T. E. (Author), Jensen, M. R. (Author), Ingersoll, M. A. (Author), Neville, C. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. (Author). 242nd National Meeting of the American Chemical Society, "Solvothermal Preparation of Nanocrystalline SnS2 via Hot-Injection and Thermal Decomposition Methods," ACS, Denver, CO. (August 28, 2011).

Kment, S. (Author & Presenter), Kmentova, H. (Author), Sarkar, A. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Krysa, J. (Author), Hubicka, Z. (Author), Olejnicek, J. (Author), Exstrom, C., Darveau, S. A. (Author). 37th IEEE Photovoltaics Specialists Conference, "A Novel Sol-Gel Route to Pinhole-Free Iron Sulfide Thin Films," IEEE, Seattle, WA. (June 2011).

Slaymaker, L. E. (Author & Presenter), Neville, C. (Author & Presenter), Hoffman, N. M. (Author), Ingersoll, M. A. (Author), Jensen, M. A. (Author), Olejníček, J. (Author), Exstrom, C. (Author), Darveau, S. A. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. (Author), Kment, S. (Author). Materials Research Society Symposium, "Properties of CuIn1-xGaxSe2 Films Prepared by the Rapid Thermal Annealing of Spray-deposited CuIn1-xGaxS2 and Se," MRS, San Francisco, CA. (April 25, 2011).

Olejníček, J. (Author & Presenter), Darveau, S. A. (Author), Exstrom, C. (Author), Slaymaker, L. E. (Author), Kment, S. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author). Materials Research Society Symposium, "Raman spectroscopy of Cu(In,Al)S2 thin films prepared by sulfurization of metallic precursors," MRS, San Francisco, CA. (April 25, 2011).

Hoffman, N. M. (Author), Slaymaker, L. E. (Author & Presenter), Olejníček, J. (Author), Exstrom, C. (Author), Darveau, S. A. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "Chemical Deposition of Microcrystalline Se Films from Commercial Se Powder in Ethylenediamine Solvent Mixtures," ACS, Wichita, KS. (October 28, 2010).

Slaymaker, L. E. (Author & Presenter), Hoffman, N. M. (Author), Ingersoll, M. A. (Author), Jensen, M. A. (Author), Olejníček, J. (Author), Exstrom, C. (Author), Darveau, S. A. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "CuInxGa(1-x)Se2 Films Prepared by Rapid Thermal Annealing of Layered Nanocrystalline CuInxGa(1-x)S2 and Se," ACS, Wichita, KS. (October 28, 2010).

Jensen, M. A. (Author & Presenter), Hervert, B. A. (Author), Darveau, S. A. (Author), Exstrom, C. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "Investigation of an Aqueous-based Solution Method for Preparing CuInSe2 using KBH4 as a Selenium Reducing Agent," ACS, Wichita, KS. (October 28, 2010).

Olejníček, J. (Author & Presenter), Darveau, S. A. (Author), Exstrom, C. (Author), Slaymaker, L. E. (Author), Kment, S. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "Raman Spectroscopy of Cu(In,Al)S2 Thin Films Prepared by Sulfurization of Metallic Precursors," ACS, Wichita, KS. (October 28, 2010).

Exstrom, C. (Author & Presenter), Darveau, S. A. (Author), Webber, T. E. (Author), Neville, C. (Author), Slaymaker, L. E. (Author), Olejnicek, J. (Author), Huang, J. (Author), Bi, Y. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. 45th Midwest Regional Meeting of the American Chemical Society, "Solvothermal Preparation of Nanocrystalline Pyrite FeS2 and its Outlook as a Third-generation Solar Cell Absorber Material," ACS, Wichita, KS. (October 28, 2010).

Ingersoll, M. A. (Author & Presenter), Jensen, M. A. (Author), Slaymaker, L. E. (Author), Olejnicek, J. (Author), Darveau, S. A. (Author), Exstrom, C. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "Solvothermal Reaction of Copper and Indium Salts with Sulfur/selenium Mixtures in Oleylamine," ACS, Wichita, KS. (October 28, 2010).

Neville, C. (Author & Presenter), Slaymaker, L. E. (Author), Olejnicek, J. (Author), Exstrom, C. (Author), Darveau, S. A. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author), Amitabha, S. (Author). 45th Midwest Regional Meeting of the American Chemical Society, "Solvothermal Reaction Studies of FeS2 and SnS2 Nanoparticle Formation," ACS, Wichita, KS. (October 28, 2010).

Sarkar, A. (Author), Soukup, R. J. (Author & Presenter), Ianno, N. J. (Author & Presenter), Kamler, C. A. (Author), Exstrom, C. (Author), Darveau, S. A. (Author), Olejnicek, J. (Author). 35th IEEE Photovoltaic Specialists Conference, "A Novel Method for Synthesis of SnS and SnS2 Thin Films as Potential Heterojunction Partners for FeS2 Solar Cells," IEEE, Honolulu, HI. (June 20, 2010).

Exstrom, C. (Author & Presenter), Darveau, S. A. (Author & Presenter), Ingersoll, M. J. (Author), Jensen, M. R. (Author), Cook, C. (Author), Slaymaker, L. E. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author). 35th IEEE Photovoltaic Specialists Conference, "Room Temperature Non-vacuum Preparation of Nanocrystalline CuInSe2 Employing Aqueous Solvents," IEEE, Honolulu, HI. (June 20, 2010).

Darveau, S. A. (Author & Presenter), Exstrom, C. (Author & Presenter), Olejnicek, J. (Author), Soukup, R. J. (Author), Ianno, N. J. (Author). 233rd National Meeting of the American Chemical Society, "Fabrication and characterization of new photovoltaic materials: CuInxB1-xSe2 (CIBS) and CBSe2 (CBS," ACS, Chicago, IL. (April 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "Acquisition of a benchtop x-ray diffractometer to enhance materials science research across the physical and earth sciences at UNK," Grant, Sponsored by Nebraska Research Initiative, State, $64,000.00. (May 2013 - Present).

Palencia, H. (Co-Principal), Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), Carlson, K. A. (Co-Principal), Reece, T. J. (Co-Principal), Kreminska, L. (Co-Principal), "Nanoscale materials imaging at the benchtop: Enhancing materials science research and education across the physical and life sciences using a new low-voltage electron microscope technology," Grant, Sponsored by University of Nebraska – Nebraska Research Initiative (NRI), University of Nebraska at Kearney, $286,610.00. (June 10, 2011 - Present).

Palencia, H. (Co-Principal), Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), Carlson, K. A. (Co-Principal), Reece, T. J. (Co-Principal), Kreminska, L. (Co-Principal), "Nanoscale materials imaging at the benchtop: Enhancing materials science research and education across the physical and life sciences using a new low-voltage electron microscope technology," Grant, Sponsored by University of Nebraska – Nebraska Research Initiative (NRI), University of Nebraska at Kearney, $286,610.00. (June 10, 2011 - Present).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "Highly Permanent Biomimetic Micro/Nanostructured Surfaces by Femtosecond Laser Surface Processing for Thermal Management Systems," Grant, Sponsored by NASA Nebraska Space Grant Program (NASA-EPSCoR), Federal, $90,369.00. (October 1, 2014 - September 30, 2017).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "Center for Nanohybrid Functional Materials," Grant, Sponsored by Nebraska EPSCoR (NSF-RII), State, $312,990.00. (October 2010 - September 2015).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "Development of High-Efficiency, Low-Cost Thin Film Solar Cells Based on Naturally Abundant and Non-Toxic Materials," Grant, Sponsored by University of Nebraska-Lincoln (Nebraska Research Initiative), $29,112.00. (July 2012 - June 2014).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), Carlson, K. A. (Co-Principal), Reece, T. J. (Co-Principal), Kreminska, L. (Co-Principal), "Nanoscale Imaging at the Benchtop: Enhancing Materials Science Research and Education across the Physical and Life Sciences using New Low-Voltage Electron Microscope Technology," Grant, Sponsored by Nebraska Research Initiative, State, $286,610.00. (July 2011 - June 2012).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "CIBS Solar Cell Development," Grant, Sponsored by U.S. Department of Energy, Federal, $936,000.00. (October 2008 - September 2011).

Exstrom, C. (Co-Principal), Darveau, S. A. (Principal), "Satellite Contaminant Materials Program," Grant, Sponsored by University of Nebraska-Lincoln (NASA), Federal, $134,523.00. (October 2008 - September 2011).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "Low-cost, Non-vacuum Nanomanufacturing of the Absorber Layer of High-efficiency Solar Cells," Grant, Sponsored by University of Nebraska-Lincoln (Nebraska Center for Energy Sciences Research), State, $20,600.00. (July 2010 - June 2011).

Exstrom, C. (Co-Principal), Darveau, S. A. (Principal), "New Science and Engineering of Carbon-Based Low-Dimensional Nanoelectronics," Grant, Sponsored by University of Nebraska-Lincoln (Nebraska Research Initiative), State, $50,000.00. (July 2009 - June 2011).

Exstrom, C. (Principal), Darveau, S. A. (Co-Principal), "A New Wide Bandgap Material for Semiconductor Solar Cell Materials," Grant, Sponsored by University of Nebraska-Lincoln (Nebraska Research Initiative), State, $132,000.00. (July 2006 - June 2010).

Service

Administrative Assignments

Director, Program. (May 1, 2012 - Present).

Professional Memberships

Institute of Electrical and Electronics Engineers. (June 1, 2009 - Present).

Materials Research Society. (March 15, 2004 - Present).

American Chemical Society. (March 1, 1994 - Present).

Sigma Xi. (April 15, 1990 - Present).

Treasurer, UNK Phi Kappa Phi Chapter, 2002-2008, Phi Kappa Phi. (April 22, 1989 - Present).

Service – Department

Caretaker, Department Bruker D2 Phaser XRD Maintenance. (2013 - Present).

Committee Member, Assessment Committee. (August 2012 - Present).

Caretaker, Department Electron Microscope Maintenance. (2011 - Present).

Caretaker, Department Electrochemistry Equipment Maintenance. (2009 - Present).

Creator and Coordinator, Chemistry Research Apprentice Program Coordinator. (January 2006 - Present).

Caretaker, Department Magnetic Susceptibility Balance Maintenance. (1998 - Present).

Caretaker, Department FTIR Spectrometer Maintenance. (1996 - Present).

Service – College

Committee Member, NSS Rank and Tenure Committee. (August 2013 - Present).

Committee Chair, Science/Math Education M.S.Ed. Gradulate Program Committee. (April 2012 - Present).

Committee Chair, NSS Advisory Committee. (August 2009 - July 2012).

Committee Member, Science/Math Education M.S.Ed. Gradulate Program Committee. (August 2011 - April 2012).

Service – University

Committee Member, Graduate Committee I. (September 2014 - Present).

Committee Member, Graduate Council. (May 2014 - Present).

Committee Member, UNK Undergraduate Research Council. (April 2012 - Present).

Committee Member, University of Nebraska system Outstanding Research and Creativity Award Committee. (October 2012 - March 2015).

Committee Member, UNK Leland Holdt/Security Mutual Life Insurance Company Distinguished Faculty Award Selection Committee. (October 2011 - December 2013).

Committee Chair, Faculty Senate Academic Freedom & Tenure Committee. (October 2011 - September 2013).

Committee Member, Director of Sponsored Programs Search Committee. (October 2012 - May 2013).

Committee Member, Faculty Senate Grievance Committee. (October 2009 - September 2011).

Committee Member, UNK Academic Success Center Advisory Board. (September 2009 - May 2011).

Committee Member, University of Nebraska system Innovation, Enhancement, and Development Award Selection Award Committee. (October 2009 - March 2010).

Service – Professional

Reviewer, Ad Hoc Reviewer, Acharya Nagarjuna University, Nagarjuna Nagar, Guntar Dist. (December 2014).

Reviewer, Journal Article, Materials Chemistry and Physics. (April 2014).

Reviewer, Ad Hoc Reviewer, University of Jordan. (April 2014).

Reviewer, Grant Proposal, Poland National Science Centre. (March 2014).

Reviewer, Journal Article, Crystal Growth and Design. (February 2014).

Reviewer, Journal Article, Materials Science in Semiconductor Processing. (January 2014).

Reviewer, Ad Hoc Reviewer, NASA. (January 2014).

Reviewer, Journal Article, Thin Solid Films. (July 2013).

Reviewer, Journal Article, Materials Research Innovations. (March 2013).

Committee Member, UNK Sigma Xi Chapter, Kearney, NE. (August 2008 - July 2012).

Carla S. Kegley-Owen
Chemistry
(308) 865-8719
Email: kegleyowencs@unk.edu

Academic Degrees

PhD, Univeristy of Colorado, Boulder, 1998.
Major: Physical Chemistry
BS, Kearney State College, 1990.
Major: Chemistry and Mathematics

Administrative Data – Permanent

Starting Rank: Lecturer
Start Date at University of Nebraska at Kearney: September 1, 2001
Date Attained Rank of Lecturer: August 20, 2001
Date Attained Rank of Senior Lecturer: August 20, 2007

Teaching

Scheduled Teaching

Fall 2010

CHEM 145, Intro Chem, 4 credit hours, 74 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 25 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 24 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 25 students enrolled, On Campus.
CHEM 188, GS Portal, 3 credit hours, 18 students enrolled, On Campus.

Spring 2011

CHEM 145, Intro Chem, 4 credit hours, 74 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 26 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 24 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 24 students enrolled, On Campus.
CHEM 161, General Chem, 3 credit hours, 47 students enrolled, On Campus.

Summer 2011

CHEM 145, Intro Chem, 4 credit hours, 16 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 16 students enrolled, On Campus.

Fall 2011

CHEM 160L, Gen Chem Lab, 1 credit hours, 23 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 23 students enrolled, On Campus.
CHEM 188, GS Portal, 3 credit hours, 20 students enrolled, On Campus.
CHEM 480, Physical Chem, 3 credit hours, 9 students enrolled, On Campus.
CHEM 480H, Physical Chem, 3 credit hours, 1 students enrolled, On Campus.
CHEM 480L, Physical Chemistry Lab, 1 credit hours, 10 students enrolled, On Campus.

Spring 2012

CHEM 161, General Chem, 3 credit hours, 43 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 21 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 20 students enrolled, On Campus.
CHEM 481, Physical Chemistry II, 3 credit hours, 4 students enrolled, On Campus.
CHEM 481L, Physical Chemistry II Lab, 1 credit hours, 5 students enrolled, On Campus.

Summer 2012

CHEM 145, Intro Chem, 4 credit hours, 17 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 17 students enrolled, On Campus.

Fall 2012

CHEM 160, General Chem, 3 credit hours, 48 students enrolled, On Campus.
CHEM 188, GS Portal, 3 credit hours, 18 students enrolled, On Campus.
CHEM 369, Junior Seminar in Chemistry, 1 credit hours, 9 students enrolled, On Campus.
CHEM 480, Physical Chem, 3 credit hours, 9 students enrolled, On Campus.
CHEM 480H, Physical Chem, 3 credit hours, 1 students enrolled, On Campus.
CHEM 480L, Physical Chemistry Lab, 1 credit hours, 10 students enrolled, On Campus.

Spring 2013

CHEM 161L, Gen Chem Lab, 1 credit hours, 17 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 12 students enrolled, On Campus.
CHEM 388, GS Capstone, 3 credit hours, 8 students enrolled, On Campus.
CHEM 388H, GS Capstone, 3 credit hours, 1 students enrolled, On Campus.
CHEM 388L, GS Capstone Lab, 1 credit hours, 8 students enrolled, On Campus.
CHEM 481, Physical Chemistry II, 3 credit hours, 2 students enrolled, On Campus.
CHEM 481L, Physical Chemistry II Lab, 1 credit hours, 2 students enrolled, On Campus.

Summer 2013

CHEM 161, General Chem, 3 credit hours, 25 students enrolled, On Campus.

Fall 2013

CHEM 145, Intro Chem, 4 credit hours, 88 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 22 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 22 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 22 students enrolled, On Campus.
CHEM 188, GS Portal, 3 credit hours, 20 students enrolled, On Campus.

Spring 2014

CHEM 161, General Chem, 3 credit hours, 43 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 15 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 23 students enrolled, On Campus.

CHEM 161L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 388, GS Capstone, 3 credit hours, 9 students enrolled, On Campus.

Summer 2014

CHEM 161, General Chem, 3 credit hours, 24 students enrolled, On Campus.

Fall 2014

CHEM 160, General Chem, 3 credit hours, On Campus.
CHEM 160, General Chem, 3 credit hours, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, On Campus.

Service

Service – College

Committee Chair, Ed Policy. (September 2012 - Present).
Committee Member, Ed Policy. (September 2010 - August 2012).
Committee Chair, Ed Policy. (September 2009 - August 2010).

Service – Public

Officer, President/Elect/Past, Buffalo County 4-H Council, Kearney, NE. (September 2012 - Present).
Officer, Treasurer, Haven's Chapel Ball, Kearney, NE. (April 2012 - Present).

Frank A. Kovacs
Chemistry
(308) 865-8384
Email: kovacsfa@unk.edu

Academic Degrees

PhD, Florida State Univerity, 1999.

Major: Molecular Biophysics

Dissertation Title: Structural Characterization of the M2 Protein Ion Channel of the Influenza A virus using Solid State NMR Spectroscopy

BS, University of West Florida, 1988.

Major: Biology

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 19, 2002

Date Attained Rank of Assistant Professor: August 19, 2002

Date Attained Rank of Associate Professor: August 18, 2008

Tenure Decision Date: August 18, 2008

Academic, Government, Military and Professional Positions

Postdoctoral Researcher, University of Massachusetts, Academic - Post-Secondary. (June 15, 1999 - August 1, 2002).

1st Lieutenant, United States Air Force, Military. (September 1, 1989 - August 31, 1993).

Teaching

Scheduled Teaching

Fall 2010

CHEM 160, General Chem, 3 credit hours, 47 students enrolled, On Campus.

CHEM 351, Biochemistry, 3 credit hours, 28 students enrolled, On Campus.

CHEM 351H, Biochemistry, 3 credit hours, 6 students enrolled, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, 18 students enrolled, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, 15 students enrolled, On Campus.

Spring 2011

CHEM 351, Biochemistry, 3 credit hours, 17 students enrolled, On Campus.

CHEM 351H, Biochemistry, 3 credit hours, 1 students enrolled, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, 16 students enrolled, On Campus.

CHEM 352, Biochemistry II, 3 credit hours, 6 students enrolled, On Campus.

CHEM 352H, Biochemistry II, 3 credit hours, 3 students enrolled, On Campus.

CHEM 352L, Biochemistry II Lab, 1 credit hours, 8 students enrolled, On Campus.

Fall 2011

CHEM 351, Biochemistry, 3 credit hours, 34 students enrolled, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, 17 students enrolled, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, 16 students enrolled, On Campus.
CHEM 451, Adv Biochemistry, 3 credit hours, 3 students enrolled, On Campus.

Spring 2012
CHEM 351, Biochemistry, 3 credit hours, 26 students enrolled, On Campus.
CHEM 351H, Biochemistry, 3 credit hours, 1 students enrolled, On Campus.
CHEM 351L, Biochemistry Lab, 1 credit hours, 18 students enrolled, On Campus.
CHEM 352, Biochemistry II, 3 credit hours, 10 students enrolled, On Campus.
CHEM 352L, Biochemistry II Lab, 1 credit hours, 9 students enrolled, On Campus.

Summer 2012
CHEM 855, Biochem for HS Teachers, 3 credit hours, 6 students enrolled, Web Based.

Spring 2013
CHEM 160, General Chem, 3 credit hours, 46 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 11 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 18 students enrolled, On Campus.
CHEM 161, General Chem, 3 credit hours, 27 students enrolled, On Campus.
CHEM 451, Adv Biochemistry, 3 credit hours, 1 students enrolled, On Campus.

Summer 2013
CHEM 855, Biochem for HS Teachers, 3 credit hours, 16 students enrolled, Web Based.

Fall 2013
CHEM 160, General Chem, 3 credit hours, 48 students enrolled, On Campus.
CHEM 160, General Chem, 3 credit hours, 48 students enrolled, On Campus.
CHEM 451, Adv Biochemistry, 3 credit hours, 7 students enrolled, On Campus.

Spring 2014
CHEM 145, Intro Chem, 0 credit hours, 22 students enrolled, On Campus.
CHEM 145, Intro Chem, 0 credit hours, 21 students enrolled, On Campus.
CHEM 351, Biochemistry, 3 credit hours, 21 students enrolled, On Campus.
CHEM 351H, Biochemistry, 3 credit hours, 1 students enrolled, On Campus.
CHEM 351L, Biochemistry Lab, 1 credit hours, 17 students enrolled, On Campus.

Summer 2014
CHEM 855, Biochem for HS Teachers, 3 credit hours, 8 students enrolled, Web Based.

Fall 2014
CHEM 160L, Gen Chem Lab, 1 credit hours, On Campus.
CHEM 351, Biochemistry, 3 credit hours, On Campus.
CHEM 351H, Biochemistry, 3 credit hours, On Campus.
CHEM 351L, Biochemistry Lab, 1 credit hours, On Campus.

CHEM 351L, Biochemistry Lab, 1 credit hours, On Campus.

Scholarship

Intellectual Contributions

Moser, A. C., White, B., Kovacs, F. A. (2014). Measuring Binding Constants of His-Tagged Proteins using Affinity Chromatography and Ni-NTA immobilized Enzymes. In Nikolaos E. Labrou (Ed.), *Methods in Molecular Biology* (vol. Chapter 30). Humana Press.

Kovacs, F. A., Sarath, G., Woodworth, K., Twigg, P., Tobias, C. M. (2013). Abolishing activity against ascorbate in a cytosolic ascorbate peroxidase from switchgrass. *Phytochemistry, 94*, 45-52. dx.doi.org/10.1016/j.phytochem.2013.05.016

Kovacs, F. A., Sarath, G., Woodworth, K., Twigg, P., Tobias, C. M. (2013). Abolishing activity against ascorbate in a cytosolic ascorbate peroxidase from switchgrass. *Phytochemistry, 94*, 45-52. dx.doi.org/10.1016/j.phytochem.2013.05.016

Presentations

Bjorklund, T. E. (Author & Presenter), Porter, Z. R. (Author), Kovacs, F. A., Glass, A. M. Midwest Regional Meeting, "Characterizing an oxidation/degradation product of SlyD en route to protein purification," American Chemical Society, Columbia, MO. (November 14, 2014).

Bjorklund, T. E. (Author & Presenter), Kovacs, F. A. (Faculty Mentor), Glass, A. M. (Faculty Mentor). Fall Student Research Symposium, "Generating and Characterizing the Nickel-Binding Domain of a Metallochaperone known as SlyD," UNK. (October 30, 2014).

Glass, A. M. (Author), Porter, Z. R. (Author & Presenter), Kovacs, F. A. (Author). Midwest Regional Meeting, "Comparing nickel binding in a metal binding protein with and without attached His6 tag," American Chemical Society, Springfield, MO. (October 17, 2013).

Kovacs, F. A. (Author), Twigg, P. (Author), Jayne, M. (Author & Presenter). Plant Biology 2013, "Characterization and engineering of a more stable ascorbate peroxidase from Panicum virgatum L.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Jayne, M. (Author & Presenter), Kovacs, F. A. (Author), Twigg, P. (Author). Plant Biology 2013, "Characterization and engineering of a more stable ascorbate peroxidase from Panicum virgatum L.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Kovacs, F. A. (Author), Woodworth, K. (Author & Presenter). UNK Student Research Day, "Site-Directed Mutagenesis of the Aromatic Binding Site of Ascorbate Peroxidase in Switchgrass," UNK RSC, Kearney, NE. (April 15, 2013).

Kovacs, F. A. (Author), White, B. (Author & Presenter), Moser, A. C. (Author). 46th Midwest/39th Great Lakes Joint Regional ACS, "Use of chromatography to characterize a substrate binding constant for a His-tag immobilized ascorbate peroxidase," American Chemical Society, St Louis, MO. (October 20, 2011).

White, B. (Author & Presenter), Moser, A. C. (Author), Kovacs, F. A. (Author). Nebraska Academy of Sciences Annual Meeting, "Use of chromatography to characterize a substrate binding constant for a His-tag immobilized enzyme," Nebraska Academy of Sciences, Lincoln, NE. (March 25, 2011).

Fusby, B. (Author & Presenter), Bauer, J. (Author), Carlson, D. J. (Author), Ericson, B. L. (Author), Kovacs, F. A. (Author), Carlson, K. A. (Author). UNK Student Research DAy, "Purification of OTK18 for determination of promoter element binding," Kearney, NE. (April 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Kovacs, F. A. (Principal), "Crystallization and Structure Determination of Ascorbate Peroxidase From Switchgrass," Grant, Sponsored by UNK Research Services Council, University of Nebraska at Kearney, $3,000.00. (June 2012 - September 2012).

Service

Professional Memberships

American Chemical Society. (January 1, 2002 - Present).

Service – Department

Committee Chair, Scholarship Committee. (January 2007 - Present).

Committee Member, Faculty Search Committee. (September 2012 - February 2013).

Committee Member, Faculty Search Committee. (September 2011 - February 2012).

Service – College

Committee Chair, Rank and Tenure. (September 2012 - May 2013).

Committee Member, CNSS Rank and Tenure. (September 2010 - May 2012).

Service – University

Committee Member, Research Services Council. (September 1, 2013 - Present).

Faculty Advisor, UNK College Republicans. (January 2009 - Present).

Dr. Haishi Cao
Chemistry
(308) 865-8105
Email: caoh1@unk.edu

Academic Degrees

Postdoc Research, Pacific Northwest National Laboratory, 2007.
Major: Bioorganic
PhD, New Mexico Institute of Mining & Technology, 2004.
Major: Organic Chemistry
MS, Jilin University, 1999.
Major: Biochemistry
BS, Jilin University, 1995.
Major: Biochemistry

Administrative Data – Permanent

Starting Rank: Assistant Professor
Start Date at University of Nebraska at Kearney: August 20, 2007
Date Attained Rank of Assistant Professor: August 20, 2007
Date Attained Rank of Associate Professor: August 13, 2012
Tenure Decision Date: August 13, 2013

Awards and Honors

Don Fox Chair of Chemistry Department, UNK, Scholarship/Research, Department. (October 2012).
faculty mentor award, UNK, Scholarship/Research, College. (May 2012).

Teaching

Scheduled Teaching

Fall 2010

CHEM 160, General Chem, 3 credit hours, 47 students enrolled, On Campus.
CHEM 160, General Chem, 3 credit hours, 47 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 24 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 24 students enrolled, On Campus.

Spring 2011

CHEM 150, Intro To Organic & Biochem, 4 credit hours, 24 students enrolled, On Campus.
CHEM 150, Intro To Organic & Biochem, 0 credit hours, 24 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 21 students enrolled, On Campus.
CHEM 161L, Gen Chem Lab, 1 credit hours, 20 students enrolled, On Campus.

Fall 2011

CHEM 160, General Chem, 3 credit hours, 46 students enrolled, On Campus.
CHEM 160, General Chem, 3 credit hours, 47 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 269, Sophomore Seminar in Chemistry, 1 credit hours, 31 students enrolled, On Campus.

Spring 2012

CHEM 160, General Chem, 3 credit hours, 48 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 22 students enrolled, On Campus.
CHEM 160L, Gen Chem Lab, 1 credit hours, 18 students enrolled, On Campus.
CHEM 461, Qualitative Organic Analysis, 3 credit hours, 4 students enrolled, On Campus.
CHEM 461L, Qual Organic Analysis Lab, 1 credit hours, On Campus.

Fall 2012

CHEM 160L, Gen Chem Lab, 1 credit hours, 21 students enrolled, On Campus.
CHEM 360, Organic Chemistry, 4 credit hours, 42 students enrolled, On Campus.
CHEM 360H, Organic Chemistry, 4 credit hours, 5 students enrolled, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, 23 students enrolled, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, 14 students enrolled, On Campus.

Spring 2013

CHEM 161L, Gen Chem Lab, 1 credit hours, 16 students enrolled, On Campus.
CHEM 361, Organic Chemistry, 4 credit hours, 28 students enrolled, On Campus.
CHEM 361L, Organic Chem Lab, 1 credit hours, 21 students enrolled, On Campus.
CHEM 361L, Organic Chem Lab, 1 credit hours, 22 students enrolled, On Campus.

Fall 2013

CHEM 160L, Gen Chem Lab, 1 credit hours, 23 students enrolled, On Campus.
CHEM 360, Organic Chemistry, 4 credit hours, 42 students enrolled, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, 19 students enrolled, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, 12 students enrolled, On Campus.

Spring 2014

CHEM 361, Organic Chemistry, 4 credit hours, 25 students enrolled, On Campus.
CHEM 361L, Organic Chem Lab, 1 credit hours, 19 students enrolled, On Campus.
CHEM 461, Qualitative Organic Analysis, 3 credit hours, 3 students enrolled, On Campus.

Fall 2014

CHEM 160L, Gen Chem Lab, 1 credit hours, On Campus.
CHEM 360, Organic Chemistry, 4 credit hours, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, On Campus.
CHEM 360L, Organic Chem Lab, 1 credit hours, On Campus.

Directed Student Learning

Master's Thesis Committee Member, Biology. (December 2012 - Present).
Advised: Li Wang

Scholarship

Intellectual Contributions

Woo, J., KIm, G., Qintero, K., Hanrahan, M. P., Palencia, H., Cao, H. (2014). Investigation of desilylation in the recognition mechanism to fluoride by a 1,8-naphthalimide derivative. *Organic & Biomolecular Chemistry*.

Song, Q., Bamesberger, A., Yang, L., Houtwed, H., Cao, H. (2014). Excimer-monomer switch: a reaction-based approach for selective detection of fluoride. *Analyst, 139*, 3588-3592.

Bamesberger, A., Schwartz, C., Song, Q., Han, W., Wang, Z., Cao, H. (2014). Rational design of a rapid fluorescent approach for detection of inorganic fluoride in aqueous media: a new fluorescence switch based on N-aryl-1,8-naphthalimide. *New Journal of Chemistry, 38*, 884-888.

Yang, L., Song, Q., Damit-OG, K., Cao, H. (2013). Synthesis and spectral investigation of a turn-on fluorescence sensor with high affinity to Cu2+. *Sensors and Actuators B: Chemical, 176*, 181.

Wang, J., Yang, L., Hou, C., Cao, H. (2012). A new N-imidazolyl-1,8-naphthalimide based fluorescence sensor for fluoride detection. *Organic & Biomolecular Chemistry, 10*, 6271.

Hou, C., Urbanec, A., Cao, H. (2011). A rapid Hg2+ sensor based on aza-15-crown-5 ether functionalized 1,8-naphthalimide. *Tetrahedron Letters*, 4903-4905.

Hou, C., Xiong, Y., Fu, N., Jacquot, C., Squier, T., Cao, H. (2011). Turn-On ratiometric fluorescent sensor toward Pb(II) detection. *Tetrahedron Letters*, 2692.

Yang, Y., Gou, X., Blecha, J., Cao, H. (2010). A highly selective pyrene based fluorescent sensor toward Hg2+ detection. *Tetrahedron Letters*, 3422.

Gou, X., Cao, H. (2010). Undergraduate chemistry education in Chinese universities. *Journal of Chemical Education*.

Presentations

Bamesberger, A. (Author & Presenter), Cao, H. (Author). ACS Middle West Regional Meeting, "A novel fluorescent approach for detection of fluoride in aqueous media with high affinity," ACS, Springfield, MO. (October 16, 2013).

Song, Q. (Author), Yang, L. (Author & Presenter), Cao, H. (Author). ACS Middle West Regional Meeting, "Excimer-monomer Switch: A new method for selective measurement of fluoride," ACS, Springfield, MO. (October 16, 2013).

Yang, L. (Author & Presenter), Cao, H. (Author). Nebraska Research and Innovation Conference, "Detecting fructose-6-phosphate by using near-IR fluorescence sensor," Nebraska EPSCoR, Omaha, NE. (October 3, 2013).

Cao, H., "Fluorescence sensing for molecules in biological system," Jilin University. (June 28, 2013).

Yang, L. (Author & Presenter), Wang, M. (Author), Cao, H. UNK student research day, "Detecting CN- in biosample by using ICT fluorescence chemosensor," UNK, Kearney, NE. (April 2013).

Wang, J. (Author & Presenter), Bamesberger, A. (Author), Song, Q. (Author), Yang, L. (Author), Cao, H. (Author). UNK student research day, "Understanding the internal charge transfer (ICT) effect in N-aryl-1,8-naphthalimide," UNK, Kearney. (April 2013).

Wang, J. (Author & Presenter), Cao, H. (Author). Nebraska academy of sciences annual meeting, "Investigation of substitution effect from phenyl ring to internal charge trasnsfer in N-aryl-1,8-naphthalimides," Nebraska academy of sciences, Lincoln, NE. (April 19, 2013).

Bamesberger, A. (Author & Presenter), Song, Q. (Author), Cao, H. (Author). 47th ACS Middle West Regional Meeting, "Investigation of substituent effect on photophysical properties of 4-amino-Naryl-1,8-naphthalimides," American Chemical Society, Omaha, NE. (October 24, 2012).

Yang, L. (Author & Presenter), Cao, H. (Author). 47th ACS Middle West Regional Meeting, "PET based chemosensor with fluorescence turn-on for detection of Cu2+," American Chemical Society, Omaha, NE. (October 24, 2012).

Yang, L. (Author & Presenter), Cao, H. (Author). UNK student research day, "Fluorescence sensor based on anthracene for cu2+ analysis," UNK, Kearney. (September 30, 2012).

Hou, C. (Author & Presenter), Cao, H. (Author). Nebraska Academia Science Annual Meeting, "A Fluorescent Sensor Based on 1,8-naphthalimide for Fluoride Sensing," Nebraska Academia Science, Lincoln. (April 2012).

Yang, L. (Author & Presenter), Cao, H. (Author). UNK student research day, "Developing C=N recognition unit on 1,8-naphthalimide for metal ions detection," UNK, Kearney. (April 2012).

Wang, J. (Author & Presenter), Cao, H. (Author). UNK Student research day, "Synthesis of N-aryl-1,8naphthalimides for investigation ofsubstituent effects on photophysical properties," UNK, Kearney. (April 2012).

Wang, J. (Author & Presenter), Cao, H. (Author), Yang, L. (Author). UNK student research day, "Develop a new Hg2+ sensor based on nanomaterials," UNK, Kearney. (October 2011).

Wang, J. (Author & Presenter), Cao, H. (Author). UNK student research day, "Developing a novel fluorescent sensor based on 1,8-naphthalimide for fluoride detection," UNK, Kearney. (October 2011).

Wang, J. (Author & Presenter), Cao, H. (Author), Yang, L. (Author). Nebraska Research and Innovation Conference, "Develop a new Hg2+ sensor based on nanomaterials," Nebraska EPSCoR, Omaha. (September 2011).

Wang, J. (Author & Presenter), Cao, H. (Author). ACS National Conference, "Developing a novel fluorescent sensor based on 1,8-naphthalimide for fluoride detection," ACS, Denver, CO. (August 2011).

Hou, C. (Author & Presenter), Cao, H. (Author). ACS National conference, "Rapid Hg2+ sensor based on crown ether functionalized 1,8-naphthalimide," ACS, Denver, CO. (August 2011).

Hou, C. (Author & Presenter), Cao, H. (Author & Presenter). Nebraska Academia Science Annual Meeting, "Fluorescent sensing for heavy metal ions," Nebraska Academia Science, Lincoln. (April 2011).

Wang, J. (Author & Presenter), Cao, H. (Author). UNK Student Research Day, "A rapid Hg2+ sensor based on intermolecular charge transfer mechanism," UNK, Kearney. (April 2011).

Cao, H. (Author), Hou, C. (Author & Presenter). UNK student research day, "N-(2-imidazole)-1,8-naphthalimide: A molecular device for fluoride analysis," UNK, Kearney. (April 2011).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Cao, H. (Principal), "Synthesis of Near-IR fluorescent molecule for detection of carbohydrate derivatives," Grant, Sponsored by Nebraska EPSCoR, State, $5,000.00. (May 1, 2013 - May 1, 2014).

Cao, H. (Principal), "Development of new reagent to enrich protein sample for proteomics," Grant, Sponsored by UNK, University of Nebraska at Kearney, $5,000.00. (May 1, 2012 - May 1, 2013).

Service

Professional Memberships

Sigma Xi. (June 1, 2009 - Present).

American Chemical Society. (September 1999 - Present).

Academic Advising

Master's Thesis Committee Member, Biology. (December 2012 - Present).
Advised: Li Wang

2013-2014

Undergraduate Students Advised: 3

Graduate Students Advised: 1

Service – Department

Committee Member, Safety committee. (July 2011 - Present).

Committee Chair, NMR maintenance committee. (June 2011 - Present).

Fluorimeter Maintenance. (May 1, 2011 - Present).

Committee Member, Science Day. (November 24, 2014).

Faculty Advisor, Mentoring junior faculty. (August 2012 - May 2014).

Committee Member, Palmer high school visitation. (March 31, 2014).

Committee Member, Science Day. (March 5, 2014).

Committee Member, New faculty search committee. (September 30, 2013 - March 1, 2014).

Committee Member, Promotion committee. (November 1, 2013 - December 1, 2013).

Committee Member, Science Day. (November 25, 2013).

Host visitors form Kearney Economic Development department. (May 3, 2013).

Committee Chair, CHEM 161 lab Coordinator. (January 2013 - April 2013).

Committee Member, Host Elwood High School visitation. (April 2, 2013).

Committee Member, Host Chemistry Day. (March 15, 2013).

Committee Member, New faculty search committee. (September 1, 2012 - March 1, 2013).

Faculty Advisor, Advising Chemistry Club. (September 1, 2007 - August 1, 2012).

Committee Member, New faculty search committee. (September 1, 2011 - March 1, 2012).

Committee Member, Host Ansley High School visitation. (March 11, 2011).

Committee Member, New faculty search committee. (September 1, 2010 - March 1, 2011).

Committee Member, Host Kearney High School visitation. (December 2, 2010).

Committee Member, Host Gibbon High School visitation. (September 22, 2010).

Committee Member, New faculty search committee. (September 1, 2009 - March 1, 2010).

Service – College

Committee Member, Dean advisory committee. (July 2012 - July 2015).

Nebraska state fair. (August 2011 - August 2012).

Service – University

Committee Member, Academic Freedom and Tenure Committee. (September 2013 - September 2015).

Committee Member, Be judge in Homecoming Week. (October 2009 - October 2010).

Service – Professional

Reviewer, Journal Article, Chinese Journal of Chemistry. (September 2014 - Present).

Reviewer, Journal Article, New Journal of Chemistry. (August 2014 - Present).

Editor, Journal Editor, International Journal of Photochemistry. (May 2014 - Present).

Reviewer, Journal Article, Inorganica Chimica Acta. (July 2013 - Present).

Reviewer, Journal Article, Chemical Communication. (2013 - Present).

Reviewer, Journal Article, Dyes and Pigments. (2013 - Present).

Reviewer, Journal Article, Journal of materials chemistry. (2013 - Present).

Reviewer, Journal Article, Spectroscopy Letters. (2013 - Present).

Reviewer, Journal Article, RSC chemistry education research and practice. (2012 - Present).

Reviewer, Journal Article, Sensor and Actuators B Chemical. (2012 - Present).

Reviewer, Journal Article, Tetrahedron Letters. (June 2011 - Present).

American Chemical Society Nebraska section. (January 2011 - Present).

Reviewer, Journal Article, Spectrochimica acta part A. (2011 - Present).

Reviewer, Journal Article, Analyst. (2010 - Present).

Reviewer, Journal Article, Journal of fluorescence. (2007 - Present).

Committee Member, Review Annual Report of American Chemical Society (ACS) Student Chapter. (2009 - 2012).

Officer, Secretary, American Chemical Society Nebraska section. (2010 - 2011).

Service – Public

Board Member, Being Judge of Nebraska Junior Academy of Science, Kearney, NE. (March 9, 2012).

Board Member, Being Judge of Central Nebraska Science & Engineering Fair, Franklin, NE. (February 25, 2012).

Board Member, Being Judge of Central Nebraska Science & Engineering Fair, Franklin, NE. (February 26, 2011).

Committee Member, Being Judge of Nebraska Junior Academy of Science Central Regional Science Fair, Kearney, NE. (March 23, 2010).

Board Member, Being Judge of Central Nebraska Science & Engineering Fair, Franklin, NE. (February 28, 2010).

Dr. Paul Twigg
Biology
(308) 865-8315
Email: twiggp@unk.edu

Academic Degrees

PhD, The University of Tennessee, 1993.

Major: Botany

Supporting Areas of Emphasis: Biochemistry

Dissertation Title: Isolation of a nodule-specific cDNA encoding a putative glycine-rich protein from Alnus glutinosa

BS, Indiana University of Pennsylvania, 1987.

Major: Biology

Supporting Areas of Emphasis: Chemistry

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 17, 1992

Date Attained Rank of Associate Professor: August 17, 1998

Date Attained Rank of Full Professor: August 14, 2006

Tenure Decision Date: August 1, 1998

Teaching

Scheduled Teaching

Fall 2010

BIOL 309, Cellular Biol, 4 credit hours, 31 students enrolled, On Campus.

BIOL 309, Cellular Biol, 0 credit hours, 15 students enrolled, On Campus.

BIOL 309, Cellular Biol, 0 credit hours, 16 students enrolled, On Campus.

BIOL 309H, Cellular Biol, 4 credit hours, 2 students enrolled, On Campus.

BIOL 309H, Cellular Biol, 0 credit hours, 1 students enrolled, On Campus.

BIOL 309H, Cellular Biol, 0 credit hours, 1 students enrolled, On Campus.

BIOL 830P, Spec Topics In Biology, 3 credit hours, 27 students enrolled, Web Based.

Spring 2011

BIOL 309, Cellular Biol, 4 credit hours, 18 students enrolled, On Campus.

BIOL 309, Cellular Biol, 0 credit hours, 13 students enrolled, On Campus.

BIOL 309, Cellular Biol, 0 credit hours, 5 students enrolled, On Campus.

BIOL 830P, Spec Topics In Biology, 3 credit hours, 25 students enrolled, Web Based.

BIOL 844, Molecular Biotechnology, 3 credit hours, 25 students enrolled, Web Based.

Summer 2011

BIOL 430H, Special Topics in Biology, 3 credit hours, 1 students enrolled, On Campus.

BIOL 830P, Special Topics in Biology, 3 credit hours, 27 students enrolled, Web Based.

Fall 2011

BIOL 309, Cellular Biology, 4 credit hours, 31 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 12 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 19 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 4 credit hours, 11 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 9 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 2 students enrolled, On Campus.
BIOL 388, GS Capstone, 3 credit hours, 1 students enrolled, On Campus.
BIOL 388L, GS Capstone Lab, 1 credit hours, 1 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 3 credit hours, 1 students enrolled, On Campus.
BIOL 430H, Special Topics in Biology, 3 credit hours, 3 students enrolled, On Campus.
BIOL 830P, Special Topics in Biology, 3 credit hours, 25 students enrolled, Web Based.

Spring 2012

BIOL 309, Cellular Biology, 4 credit hours, 21 students enrolled, On Campus.
BIOL 309, Cellular Biology, 0 credit hours, 21 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 4 credit hours, 1 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 0 credit hours, 1 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 3 credit hours, 1 students enrolled, Web Based.
BIOL 814, Plant Pathology, 3 credit hours, 22 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 3 credit hours, 6 students enrolled, Web Based.

Summer 2012

BIOL 830P, Special Topics in Biology, 3 credit hours, 28 students enrolled, Web Based.

Fall 2012

BIOL 309, Cellular Biology, 4 credit hours, 37 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 4 credit hours, 6 students enrolled, On Campus.
BIOL 430, Special Topics in Biology, 3 credit hours, 2 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 3 credit hours, 23 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 3 credit hours, 12 students enrolled, Web Based.

Spring 2013

BIOL 309, Cellular Biology, 4 credit hours, 14 students enrolled, On Campus.
BIOL 309H, Cellular Biology, 4 credit hours, 2 students enrolled, On Campus.
BIOL 417, Mycology, 3 credit hours, 3 students enrolled, Web Based.
BIOL 830P, Special Topics in Biology, 3 credit hours, 7 students enrolled, Web Based.
BIOL 844, Molecular Biotechnology, 3 credit hours, 24 students enrolled, Web Based.

Summer 2013

BIOL 845, Forensic Biology, 3 credit hours, 27 students enrolled, Web Based.

Fall 2013

BIOL 309, Cellular Biology, 4 credit hours, 33 students enrolled, On Campus.

BIOL 309H, Cellular Biology, 4 credit hours, 12 students enrolled, On Campus.

BIOL 830P, Special Topics in Biology, 3 credit hours, 25 students enrolled, Web Based.

BIOL 846, Cancer Biology, 3 credit hours, 24 students enrolled, Web Based.

Spring 2014

BIOL 309, Cellular Biology, 4 credit hours, 15 students enrolled, On Campus.

BIOL 309H, Cellular Biology, 4 credit hours, 2 students enrolled, On Campus.

BIOL 814, Plant Pathology, 3 credit hours, 16 students enrolled, Web Based.

BIOL 830P, Special Topics in Biology, 3 credit hours, 21 students enrolled, Web Based.

Summer 2014

BIOL 845, Forensic Biology, 3 credit hours, 21 students enrolled, Web Based.

Fall 2014

BIOL 309, Cellular Biology, 4 credit hours, On Campus.

BIOL 309H, Cellular Biology, 4 credit hours, On Campus.

BIOL 430, Special Topics in Biology, 3 credit hours, On Campus.

BIOL 830P, Special Topics in Biology, 3 credit hours, Web Based.

BIOL 846, Cancer Biology, 3 credit hours, Web Based.

Directed Student Learning

Experiential Learning, Biology. (August 2013 - Present).
Advised: Sydney Peak

Master's Thesis Committee Chair, Biology. (August 2013 - Present).
Advised: Corey Willicott

Independent Study, "Effect of molybdenum deprivation on lipid accumulation in Chlamydomonas reinhardtii," Biology. (January 2013 - Present).
Advised: Asa Russell

Independent Study, "Effect of cover crops on the progress of Goss's wilt in corn," Biology. (January 2013 - Present).
Advised: Jacob Fritton

Independent Study, "Effect of iron deprivation on lipid accumulation in Chlamydomonas reinhardtii," Biology. (January 2013 - Present).
Advised: MaryAnn Pelc

Independent Study, "Prospecting for microalgae useful for biodiesel production in central Nebraska," Biology. (January 2013 - Present).
Advised: Rachel Schnoor

Master's Thesis Committee Chair, Biology. (August 2012 - Present).
Advised: Li Wang

Independent Study, "Effect of copper deprivation on lipid accumulation in Chlamydomonas reinhardtii," Biology. (January 2012 - Present).
Advised: Brandon Karlin

Experiential Learning, Biology. (September 2010 - Present).
Advised: Kelsie Musil

Dissertation Committee Member. (August 2009 - Present).
Advised: Crystal Ramm

Dissertation Committee Member. (August 2009 - Present).
Advised: Travis Prochaska

Independent Study, "Effect of cobalt deprivation on lipid accumulation in Chlamydomonas reinhardtii," Biology. (August 2012 - July 2013).
Advised: Polly Davis

Independent Study, "Effect of mulches on productivity in varieties of peppers," Biology. (January 2012 - July 2013).
Advised: Marguerite Gallegos

Master's Thesis Committee Chair, "Chlorophyll degradation and transcription factor up-regulation regulation upon nitrogen deprivation in Chlamydomonas reinhardtii," Biology. (August 2012 - May 2013).
Advised: Pepper May

Experiential Learning, Biology. (January 2012 - May 2013).
Advised: Kara Brungardt

Independent Study, "Effect of zinc deprivation on accumulation of lipid droplets in Chlamydomonas reinhardtii," Biology. (January 2012 - May 2013).
Advised: Kelsie Musil

Master's Thesis Committee Chair, "Transcriptomic and transcription factor changes in buffalograss when exposed to drought," Biology. (August 2009 - December 2012).
Advised: Steven Vitosh

Master's Thesis Committee Chair, "Effect of nitrogen deprivation on transcription factor expression and lipid accumulation in Chlamydomonas reinhardtii," Biology. (August 2010 - May 2012).
Advised: Annastasia Barber

Independent Study, "Effect of manganese deprivation on lipid accumulation in Chlamydomonas reinhardtii," Biology. (January 2011 - April 2012).
Advised: Meagan Doyle

Dissertation Committee Member. (August 2006 - December 2011).
Advised: Teresa Donze

Master's Thesis Committee Chair, "Effect on transcriptomic expression of hydrogen peroxide treatment in switchgrass seeds," Biology. (January 2010 - July 2011).
Advised: Martha Montanez

Supervision of Students

Internship, BIOL 475. Fall 2011. 1 supervised.

Internship, BIOL 475. Fall 2011. 1 supervised.

Scholarship

Intellectual Contributions

Wachholz, M., Heng-Moss, T., Twigg, P., Baird, L., Lu, G., Amundsen, K. (2013). Transcriptome analysis of two buffalograss cultivars. *BMC Genomics, 14*, 613-625.

Saathoff, A., Donze, T., Nathan, P., Bradshaw, J., Heng-Moss, T., Twigg, P., Tobias, C., Lagrimini, M., Sarath, G. (2013). Towards uncovering the roles of switchgrass peroxidases in plant processes. *Frontiers in Plant Science, 4*, 1-12.

Kovacs, F. A., Sarath, G., Woodworth, K., Twigg, P., Tobias, C. M. (2013). Abolishing activity against ascorbate in a cytosolic ascorbate peroxidase from switchgrass. *Phytochemistry, 94*, 45-52. dx.doi.org/10.1016/j.phytochem.2013.05.016

Kovacs, F. A., Sarath, G., Woodworth, K., Twigg, P., Tobias, C. M. (2013). Abolishing activity against ascorbate in a cytosolic ascorbate peroxidase from switchgrass. *Phytochemistry, 94*, 45-52. dx.doi.org/10.1016/j.phytochem.2013.05.016

Saathoff, A., Hargrove, M., Haas, E., Tobias, C., Twigg, P., Sattler, S., Sarath, G. (2012). Switchgrass PviCAD1: Understanding residues important for substrate preferences and activity. *Applied Biochemistry and Biotechnology, 168*, 1086-1100.

Palmer, N., Saathoff, A., Kim, J., Benson, A., Tobias, C., Twigg, P., Vogel, K., Madhavan, S., Sarath, G. (2012). Next generation sequencing of crown and rhizome transcriptome from an upland, tetraploid switchgrass. *Bioenergy Research, 5*, 649-661.

Saathoff, A., Tobias, C., Sattler, S., Haas, E., Twigg, P., Sarath, G. (2011). Switchgrass contains two cinnamyl alcohol dehydrogenases involved in lignin formation. *Bioenergy Research, 4*, 120-133.

Babian, C., Twigg, P. (2011). The power of plants: Introducing ethnobotany and biophilia into your biology class. *The American Biology Teacher, 73*, 217-221.

Presentations

Sarath, G. (Author & Presenter), Palmer, N. (Author), Donze, T. (Author), Saathoff, A. (Author), Tobias, C. (Author), Twigg, P. (Author), Soundararajan, M. (Author), Heng-Moss, T. (Author), Baird, L. (Author), Vogel, K. (Author). Switchgrass II, "A lens into switchgrass flag leaf metabolism," Switchgrass Genomics, Madison, WI. (September 10, 2013).

Musil, K. (Author & Presenter), Brungardt, K. (Author), Twigg, P. (Author). Annual NE-EPSCoR Meeting, "Effect of zinc and nitrogen deprivation on lipid accumulation in Chlamydomonas.," EPSCoR, Lincoln, NE. (August 22, 2013).

Wang, L. (Author & Presenter), Davis, P. (Author), Musil, K. (Author), Twigg, P. (Author). Annual NE-EPSCoR Meeting, "Quantitation of lipid accumulation in Chlamydomonas reinhardtii under nutrient stress using nile red fluorometry," EPSCoR, Lincoln, NE. (August 22, 2013).

Willicott, C. (Author & Presenter), Musil, K. (Author & Presenter), Twigg, P. (Author). Annual NE-EPSCoR Meeting, "Quantitation of transcription factor transcript accumulation under nitrogen stress in Chlamydomonas reinhardtii," EPSCoR, Lincoln, NE. (August 22, 2013).

May, P. (Author), Musil, K. (Author), Brungardt, K. (Author), Twigg, P. (Author & Presenter). Annual NE-EPSCoR Meeting, "Transcription factor up-regulation related to chlorophyll degradation in Chlamydomonas reinhardtii.," EPSCoR, Lincoln, NE. (August 22, 2013).

Jayne, M. (Author & Presenter), Kovacs, F. A. (Author), Twigg, P. (Author). Plant Biology 2013, "Characterization and engineering of a more stable ascorbate peroxidase from Panicum virgatum L.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Kovacs, F. A. (Author), Twigg, P. (Author), Jayne, M. (Author & Presenter). Plant Biology 2013, "Characterization and engineering of a more stable ascorbate peroxidase from Panicum virgatum L.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Musil, K. (Author & Presenter), Brungardt, K. (Author), Twigg, P. (Author). Plant Biology 2013, "Effect of zinc and nitrogen deprivation on lipid accumulation in Chlamydomonas.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Wang, L. (Author & Presenter), Davis, P. (Author), Musil, K. (Author), Twigg, P. (Author). Plant Biology 2013, "Quantitation of lipid accumulation in Chlamydomonas reinhardtii under nutrient stress using nile red fluorometry," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

May, P. (Author), Musil, K. (Author), Brungardt, K. (Author), Twigg, P. (Author). Plant Biology 2013, "Transcription factor up-regulation related to chlorophyll degradation in Chlamydomonas reinhardtii.," American Society of Plant Biologists, Providence, RI. (July 21, 2013).

Musil, K. (Author & Presenter), Brungardt, K. (Author), Twigg, P. (Author). Annual Meeting of the Nebraska Academy of Sciences, "Effect of zinc and nitrogen deprivation on lipid accumulation in Chlamydomonas.," Nebraska Academy of Sciences, Lincoln, NE. (April 22, 2013).

May, P. (Author & Presenter), Brungardt, K. (Author), Musil, K. (Author), Twigg, P. (Author). Annual NE-EPSCoR Meeting, "Chlorophyll degradation and lipid droplet accumulation in Chlamydomonas reinhardtii.," EPSCoR, Lincoln, NE. (August 15, 2012).

Barber, A. (Author), May, P. (Author), Musil, K. (Author), Twigg, P. (Author & Presenter). Annual NE-EPSCoR Meeting, "Expression of transcription factors linked to lipid accumulation in Chlamydomonas reinhardtii," EPSCoR, Lincoln, NE. (August 15, 2012).

May, P. (Author & Presenter), Musil, K. (Author), Brungardt, K. (Author), Twigg, P. (Author). Plant Biology 2012, "Chlorophyll degradation and lipid droplet accumulation in Chlamydomonas reinhardtii.," American Society of Plant Biologists, Austin, TX. (July 20, 2012).

Barber, A. (Author), May, P. (Author), Musil, K. (Author), Twigg, P. (Author & Presenter). Plant Biology 2012, "Expression of transcription factors linked to lipid accumulation in Chlamydomonas reinhardtii.," American Society of Plant Biologists, Austin, TX. (July 20, 2012).

Twigg, P. (Author & Presenter), Musil, K. (Author), Brungardt, K. (Author). Plant Biology 2012, "Transcriptomic efforts in the improvement of switchgrass fitness," American Society of Plant Biologists, Austin, TX. (July 20, 2012).

Amundsen, K. (Author & Presenter), Brown, J. (Author), Wachholz, M. (Author), Amaradasa, B. S. (Author), Lu, G. (Author), Twigg, P. (Author), Heng-Moss, T. (Author). 7th International Symposium of the Molecular Breeding of Forage and Turf, "Rapid SSR marker development in buffalograss," Molecular Breeding of Forage and Turf, Salt Lake City, UT. (June 4, 2012).

Doyle, M. (Author & Presenter), Musil, K. (Author), Barber, A. (Author), Twigg, P. (Author). Annual Meeting of the Nebraska Academy of Sciences, "Effect of manganese and nitrogen deprivation on lipid accumulation in Chlamydomonas," Nebraska Academy of Sciences, Lincoln, NE. (April 20, 2012).

Sarath, G. (Author & Presenter), Palmer, N. (Author), Saathoff, A. (Author), Tobias, C. (Author), Twigg, P. (Author), Vogel, K. (Author), Soundararajan, M. (Author). International Plant and Animal Genome XX Conference, "Building improved crown and rhizome transcriptomes to evaluate seasonal changes in switchgrass populations with divergent winter survival," International Plant and Animal Genome, San Diego, CA. (January 14, 2012).

Palmer, N. (Author & Presenter), Saathoff, A. (Author), Kim, J. (Author), Benson, A. (Author), Tobias, C. (Author), Twigg, P. (Author), Vogel, K. (Author), Soundararajan, M. (Author), Sarath, G. (Author). International Plant and Animal Genome XX Conference, "De novo hybrid transcriptome assembly and RNA-seq analysis of switchgrass crowns and rhizomes," International Plant and Animal Genome, San Diego, CA. (January 14, 2012).

Prochaska, T. (Author & Presenter), Marchi, L. (Author), Heng-Moss, T. (Author), Hunt, T. (Author), Reese, J. (Author), Palmer, N. (Author), Xia, Y. (Author), Twigg, P. (Author). Entomology 2011, "Molecular insights into the tolerance response of the genotype KS4202 to Aphis glycines Matsumura (Hemiptera: Aphididae)," Entomological Society of America, Reno, NV. (November 13, 2011).

Wachholz, M. (Author & Presenter), Heng-Moss, T. (Author), Amundsen, K. (Author), Twigg, P. (Author), Lu, G. (Author), Sarath, G. (Author). 2011 Ecological Genomics Symposium, "Transcriptome Analysis of Western Chinch Bug (Blissus occiduus) Infested Buffalograss," Ecological Genomics Institute, Kansas City, MO. (November 4, 2011).

Sarath, G. (Author & Presenter), Heng-Moss, T. (Author), Bradshaw, J. (Author), Lagrimini, M. (Author), Twigg, P. (Author), Li, G. (Author). National Institute of Food and Agriculture PI Meeting, "Mitigating insect herbivory of warm-season bioenergy grasses: Getting ahead of the curve.," National Institute of Food and Agriculture, Arlington, VA. (October 24, 2011).

Barber, A. (Author & Presenter), Musil, K. (Author), Twigg, P. (Author). Annual NE-EPSCoR Meeting, "Effect of nitrogen deprivation on accumulation of lipids and a new RNA extraction method in Chlamydomonas," EPSCoR, Lincoln, NE. (August 12, 2011).

Vitosh, S. (Author & Presenter), Heng-Moss, T. (Author), Twigg, P. (Author). Plant Biology 2011, "Assessing the genetic profile of drought resistance in buffalograss," American Society of Plant Biologists, Minneapolis, MN. (August 6, 2011).

Montanez, M. (Author & Presenter), Twigg, P. (Author). Plant Biology 2011, "Effect of exogenous hydrogen peroxide on transcript expression in switchgrass seeds," American Society of Plant Biologists, Minneapolis, MN. (August 6, 2011).

Barber, A. (Author & Presenter), Musil, K. (Author), Twigg, P. (Author). Plant Biology 2011, "Effect of nitrogen deprivation on accumulation of lipids and a new RNA extraction method in Chlamydomonas," American Society of Plant Biologists, Minneapolis, MN. (August 6, 2011).

Sarath, G. (Author & Presenter), Palmer, N. (Author), Saathoff, A. (Author), Tobias, C. (Author), Twigg, P. (Author), Soundararajan, M. (Author), Vogel, K. (Author), Kim, J. (Author). International Plant and Animal Genome XIX

Conference, "The hunt for green every April: Phenotypic and metabolomic analysis of nutrient remobilization in switchgrass," International Plant and Animal Genome, San Diego, CA. (January 15, 2011).

Service

Professional Memberships

American Society of Plant Biologists. (August 17, 1992 - Present).

Academic Advising

Master's Thesis Committee Chair, Biology. (August 2013 - Present).
Advised: Corey Willicott

Master's Thesis Committee Chair, Biology. (August 2012 - Present).
Advised: Li Wang

Master's Thesis Committee Chair, "Chlorophyll degradation and transcription factor up-regulation regulation upon nitrogen deprivation in Chlamydomonas reinhardtii," Biology. (August 2012 - May 2013).
Advised: Pepper May

Master's Thesis Committee Chair, "Transcriptomic and transcription factor changes in buffalograss when exposed to drought," Biology. (August 2009 - December 2012).
Advised: Steven Vitosh

Master's Thesis Committee Chair, "Effect of nitrogen deprivation on transcription factor expression and lipid accumulation in Chlamydomonas reinhardtii," Biology. (August 2010 - May 2012).
Advised: Annastasia Barber

Master's Thesis Committee Chair, "Effect on transcriptomic expression of hydrogen peroxide treatment in switchgrass seeds," Biology. (January 2010 - July 2011).
Advised: Martha Montanez

2011-2012

Undergraduate Students Advised: 50

Graduate Students Advised: 17

2012-2013

Undergraduate Students Advised: 65

Graduate Students Advised: 10

2013-2014

Undergraduate Students Advised: 60

Graduate Students Advised: 15

Service – Department

Committee Chair, Faculty search committee. (August 2013 - Present).

Committee Member, Lab Fees. (June 2013 - Present).

Committee Chair, Nepotism. (June 2013 - Present).

Committee Chair, Peer Review. (June 2013 - Present).

Committee Member, Undergraduate Research. (August 2012 - Present).

Committee Member, Greenhouse and collections. (August 1992 - Present).

Service – University

Committee Member, Faculty Senate Student Affairs. (August 2013 - Present).

Committee Member, Search Commitee-OSP. (January 2013 - Present).

Committee Chair, Radiation Safety Officer. (January 1998 - Present).

Committee Member, Faculty Senate Grievance. (January 2012 - August 2013).

Dr. Amy L. Nebesniak
Mathematics
(308) 865-8643
Email: NEBESNIAKA2@UNK.EDU

Academic Degrees

EdD, University of Nebraska - Lincoln, 2012.

Major: Teaching, Learning, and Teacher Education

Supporting Areas of Emphasis: Mathematics Education

Dissertation Title: Learning to Teach Mathematics with Reasoning and Sense Making

MA, University of Nebraska - Lincoln, 2007.

Major: Teaching, Learning, Teacher Education

Supporting Areas of Emphasis: Mathematics Minor

Dissertation Title: Using Cooperative Learning to Promote a Problem- Solving Classroom

BS, University of Nebraska - Kearney, 2002.

Major: Middle School Education

Supporting Areas of Emphasis: Subject Areas: Mathematics, Natural Sciences, and Social Sciences

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 19, 2013

Date Attained Rank of Assistant Professor: August 19, 2013

Academic, Government, Military and Professional Positions

Graduate Faculty, University of Nebraska at Kearney, Academic - Post-Secondary. (March 20, 2014 - Present).

Assistant Professor, University of Nebraska at Kearney, Academic - Post-Secondary. (August 2013 - Present).

Assistant Professor of Education, Washburn University, Academic - Post-Secondary. (August 2012 - July 2013).

Adjunct Professor, University of Nebraska - Lincoln, Academic - Post-Secondary. (August 2007 - July 2013).

Secondary Mathematics Instructional Coach, Lincoln Public Schools, Academic - P-12. (August 2008 - July 2012).

Secondary Mathematics Educator, Grand Island Public Schools, Academic - P-12. (August 2006 - July 2008).

Secondary Mathematics Educator, Lincoln Public Schools, Academic - P-12. (August 2002 - July 2006).

Teaching

Scheduled Teaching

Fall 2013

MATH 230, Math for Elementary Teachers I, 3 credit hours, 36 students enrolled, On Campus.

MATH 330, Math for Elem Teachers II, 3 credit hours, 23 students enrolled, On Campus.

MATH 330, Math for Elem Teachers II, 3 credit hours, 37 students enrolled, On Campus.

MATH 330H, Math for Elem Teachers II, 3 credit hours, 1 students enrolled, On Campus.

Spring 2014

MATH 230, Math for Elementary Teachers I, 3 credit hours, 33 students enrolled, On Campus.

MATH 230, Math for Elementary Teachers I, 3 credit hours, 23 students enrolled, On Campus.

MATH 330, Math for Elem Teachers II, 3 credit hours, 31 students enrolled, On Campus.

MATH 330H, Math for Elem Teachers II, 3 credit hours, 1 students enrolled, On Campus.

Summer 2014

MATH 102, College Algebra, 3 credit hours, 41 students enrolled, On Campus.

Fall 2014

MATH 230, Math for Elementary Teachers I, 3 credit hours, On Campus.

MATH 330, Math for Elem Teachers II, 3 credit hours, On Campus.

MATH 330, Math for Elem Teachers II, 3 credit hours, On Campus.

MATH 330H, Math for Elem Teachers II, 3 credit hours, On Campus.

Directed Student Learning

Directed Individual, "Equivalent Fractions - Math Lesson Plans," Teacher Education. (January 2014 - May 2014). Advised: Alexis Delvaux

Directed Individual, "Adding Fractions - Math Lesson Plans," Teacher Education. (August 2013 - December 2013). Advised: Jordan Jansky

Supervision of Students

Honors Program - "H-option" project, Mathematics for the Elementary Teacher II, MATH 330. Fall 2014. 1 supervised.

Honors Program - "H-option" project, Mathematics for the Elementary Teacher II, MATH 330. Spring 2014. 1 supervised.

Honors Program - "H-option" project, Mathematics for the Elementary Teacher II, MATH 330. Fall 2013. 1 supervised.

Scholarship

Intellectual Contributions

Nebesniak, A. L. (2012). Effective instruction: A math coach's perspective. *Mathematics Teacher, 106*(5), 354-358.

Nebesniak, A. L. (2012). Line-up. *Nebraska Association of Teachers of Mathematics Journal*.

Nebesniak, A. L. (2012). Cooperative Learning and Mathematics. *Nebraska Association of Teachers of Mathematics Journal*.

Nebesniak, A. L. (2011). Take-off, touch-down. *Nebraska Association of Teachers of Mathematics Journal*.

Nebesniak, A. L. (2011). Pulled in all directions. *Nebraska Association of Teachers of Mathematics Journal*.

Nebesniak, A. L. (2011). A few of my favorite (cooperative learning) things. *Nebraska Association of Teachers of Mathematics Journal*.

Nebesniak, A. L., Heaton, R. M. (2010). Student confidence and student involvement. *Mathematics teaching in the middle school, 16*(2), 97-103.

Presentations

Nebesniak, A. L. (Author & Presenter), Burgoa, A. (Author & Presenter). National Council of Teacher of Mathematics Regional Conference, "Math: A Not So Universal Language," National Council of Teacher of Mathematics, Louisville, KY. (November 8, 2013).

Nebesniak, A. L. (Author & Presenter). Culler Middle School Faculty Meeting, "Cooperative learning in the middle school classroom," Culler Middle School, Culler Middle School. (August 2013).

Nebesniak, A. L. (Presenter), Berks, D. (Presenter). National Council of Teacher of Mathematics Annual Conference, "Racecars, pennies, and men with hats: Teaching algebra for understanding.," National Council of Teacher of Mathematics, Denver, CO. (April 2013).

Nebesniak, A. L. (Author & Presenter). Algebra for Algebra Teachers, "Using content mapping to make instructional decisions," University of Nebraska - Lincoln. (June 2012).

Nebesniak, A. L. (Author & Presenter). Student Research Conference, "Teaching mathematics with reasoning and sense making.," University of Nebraska College of Education and Human Sciences, University of Nebraska - Lincoln. (November 2011).

Nebesniak, A. L. (Author & Presenter). Schoo Middle School Faculty Meeting, "Cooperative learning in the middle school classroom - Level 2," Schoo Middle School. (July 2011).

Nebesniak, A. L. (Author & Presenter). Pre-Professional Conference, "How to get started: Tips and ideas for the first days of school," Nebraska Association of Teachers of Mathematics, Lincoln, NE. (November 2010).

Nebesniak, A. L. (Author & Presenter). Student Research Conference, "Instructional coaching in the Algebra classroom," University of Nebraska College of Education and Human Sciences, University of Nebraska - Lincoln. (November 2010).

Nebesniak, A. L. (Author & Presenter). Schoo Middle School Faculty Meeting, "Cooperative learning in the middle school classroom - Level 1," Schoo Middle School. (July 2010).

Nebesniak, A. L. (Author & Presenter). Columbus Middle School Faculty Meeting, "Cooperative learning in the middle school classroom," Columbus Middle School. (June 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Nebesniak, A. L. (Co-Principal), Ford, P. L. (Co-Principal), "Pre-Service Mathematics Teacher Conference," Grant, Sponsored by Department of Teacher Education - Program of Excellence Award, University of Nebraska at Kearney, $4,500.00. (January 2015 - May 1, 2015).

Nebesniak, A. L. (Co-Principal), (Co-Principal), "Teaching Mathematics using Mini Projectors," Grant, Sponsored by Department of Teacher Education - Program of Excellence Award, University of Nebraska at Kearney, $1,000.00. (January 2015 - May 1, 2015).

Nebesniak, A. L. (Principal), "Use of Manipulatives in Math Courses for Elementary Teachers," Grant, Sponsored by UNK College of Education - Program of Excellence Award, University of Nebraska at Kearney, $760.00. (December 2013 - May 2014).

Nebesniak, A. L., "Travel Award," Grant, Sponsored by , University of Nebraska at Kearney, $750.00. (September 2013 - December 2013).

Service

Professional Memberships

Association for Supervisors and Curriculum Development. (January 2010 - Present).

National Council of Supervisors of Mathematics. (January 2008 - Present).

National Council of Teachers of Mathematics. (January 2008 - Present).

Second Vice President, Nebraska Association of Teachers of Mathematics. (August 2002 - Present).

American Educational Research Association. (January 2008 - December 2012).

Academic Advising

2012-2013

Undergraduate Students Advised: 25

Graduate Students Advised: 0

Service – Department

Committee Member, Faculty and Student Affairs Committee. (August 2014 - Present).

Committee Member, Graduate Committee. (August 2014 - Present).

Committee Member, Policy and Planning Committee. (August 2014 - Present).

Committee Chair, MATH 230 Course Coordinator. (August 2013 - Present).

Committee Member, Academic Programs. (August 2013 - July 2014).

Committee Member, Assessment Committee. (August 2013 - July 2014).

Committee Member, Search Committee for Assistand Professor positions. (August 2013 - July 2014).

Loper Review Day. (January 28, 2014).

Committee Member, Education Department Undergraduate Committee. (August 2012 - May 2013).

Committee Member, Field Experience Committee. (August 2012 - May 2013).

Committee Member, Technology committee. (August 2012 - May 2013).

Service – University

Committee Member, NU STEM Education. (March 2014 - Present).

Speaker, Invited Talk - UNK Learning Commons Tutors. (September 4, 2014).

Service – Professional

Session Chair, Greater Nebraska Math Teachers Circle, Grand Island, NE. (November 18, 2013).

Reviewer, Journal Article, National Council of Supervisors of Mathematics, Denver, CO. (September 2013 - October 2013).

Service – Public

Attendee, Meeting, Kearney Public Schools - Professional Development Day. (January 15, 2014 - January 16, 2014).

Other

Faculty Development Activities Attended

Conference Attendance, "Nebraska Summit on Math and Science Education," University of Nebraska - Lincoln, Lincoln, NE. (December 8, 2014).

Conference Attendance, "Innovation in Pedagogy and Technology Symposium," University of Nebraska Information Technology (UNIT) and the University of Nebraska Online Worldwide, Lincoln, NE, Regional. (May 15, 2014).

Conference Attendance, "National Council of Teachers of Mathematics Regional Conference," National Council of Teachers of Mathematics, Louisville, Kentucky, International. (November 6, 2013 - November 8, 2013).

Conference Attendance, "Nebraska Association of Teacher of Mathematics Annual Conference," Nebraska Association of Teacher of Mathematics, Kearney, NE, State. (September 30, 2013).

Dr. Jacob J. Weiss
Mathematics
(308) 865-8551
Email: weissjj@unk.edu

Academic Degrees

PhD, University of Nebraska - Lincoln, 2007.
Major: Mathematics
Dissertation Title: Second Order Equations on Time Scales
MS, University of Nebraska - Lincoln, 2002.
Major: Mathematics
BS, University of Nebraska - Kearney, 2000.
Major: Mathematics Comprehensive
Supporting Areas of Emphasis: Physics

Administrative Data – Permanent

Starting Rank: Assistant Professor
Start Date at University of Nebraska at Kearney: August 20, 2007
Date Attained Rank of Assistant Professor: August 20, 2007

Teaching

Scheduled Teaching

Fall 2010

MATH 101, Intermed Algebra, 3 credit hours, 39 students enrolled, On Campus.
MATH 103, Plane Trigonometry, 3 credit hours, 37 students enrolled, On Campus.
MATH 115, Calc I W/Anlyt Geom, 5 credit hours, 24 students enrolled, On Campus.

Spring 2011

MATH 115, Calc I W/Anlyt Geom, 5 credit hours, 36 students enrolled, On Campus.
MATH 440, Linear Algebra, 3 credit hours, 24 students enrolled, On Campus.
MATH 440H, Linear Algebra, 3 credit hours, 2 students enrolled, On Campus.

Summer 2011

MATH 123, Applied Calculus I, 3 credit hours, 25 students enrolled, On Campus.

Fall 2011

MATH 101, Intermediate Algebra, 3 credit hours, 46 students enrolled, On Campus.
MATH 103, Plane Trigonometry, 3 credit hours, 37 students enrolled, On Campus.
MATH 460, Advanced Calculus I, 3 credit hours, 21 students enrolled, On Campus.

Spring 2012

MATH 260, Calculus III, 5 credit hours, 18 students enrolled, On Campus.
MATH 305, Differential Equations, 3 credit hours, 17 students enrolled, On Campus.
MATH 305H, Differential Equations, 3 credit hours, 3 students enrolled, On Campus.

Summer 2012

MATH 123, Applied Calculus I, 3 credit hours, 28 students enrolled, On Campus.

Fall 2012

MATH 102, College Algebra, 3 credit hours, 45 students enrolled, On Campus.

MATH 202, Calc II w/ Analytic Geometry, 5 credit hours, 31 students enrolled, On Campus.

STAT 241, Elementary Statistics, 3 credit hours, 45 students enrolled, On Campus.

Spring 2013

MATH 260, Calculus III, 5 credit hours, 22 students enrolled, On Campus.

MATH 305, Differential Equations, 3 credit hours, 13 students enrolled, On Campus.

MATH 305H, Differential Equations, 3 credit hours, 2 students enrolled, On Campus.

MATH 440, Linear Algebra, 3 credit hours, 24 students enrolled, On Campus.

MATH 440H, Linear Algebra, 3 credit hours, 1 students enrolled, On Campus.

Summer 2013

MATH 123, Applied Calculus I, 3 credit hours, 24 students enrolled, On Campus.

Fall 2013

MATH 103, Plane Trigonometry, 3 credit hours, 39 students enrolled, On Campus.

MATH 260, Calculus III, 5 credit hours, 15 students enrolled, On Campus.

STAT 241, Elementary Statistics, 3 credit hours, 45 students enrolled, On Campus.

Spring 2014

MATH 103, Plane Trigonometry, 3 credit hours, 40 students enrolled, On Campus.

MATH 202, Calc II w/ Analytic Geometry, 5 credit hours, 29 students enrolled, On Campus.

MATH 305, Differential Equations, 3 credit hours, 9 students enrolled, On Campus.

MATH 305H, Differential Equations, 3 credit hours, 1 students enrolled, On Campus.

Summer 2014

MATH 123, Applied Calculus I, 3 credit hours, 20 students enrolled, On Campus.

MATH 871, Topics in Math, 3 credit hours, 5 students enrolled, Web Based.

Fall 2014

MATH 103, Plane Trigonometry, 3 credit hours, On Campus.

MATH 115, Calculus I w/Analytic Geometry, 5 credit hours, On Campus.

STAT 241, Elementary Statistics, 3 credit hours, On Campus.

Scholarship

Intellectual Contributions

Weiss, J. J., Clark, A. S. (2012). On the geometry of a four-parameter rational planar system of dierence equations. *Journal of Dierence Equations and Applications, 18*(3), 509-524.

Service

Academic Advising

2012-2013

Undergraduate Students Advised: 20

2013-2014

Undergraduate Students Advised: 22

Service – Department

Committee Member, Anual and Endowed Scholarships. (August 2013 - May 2014).

Committee Member, Assessment. (August 2013 - May 2014).

Committee Chair, Faculty and Student Affairs. (August 2013 - May 2014).

Committee Member, Graduate. (August 2013 - May 2014).

Committee Chair, Peer Review. (August 2013 - May 2014).

Committee Member, Academic Programs. (August 2012 - May 2013).

Committee Member, Annual and Endowed Scholarships. (August 2012 - May 2013).

Committee Chair, Faculty and Student Aairs. (August 2012 - May 2013).

Committee Chair, Graduate. (August 2012 - May 2013).

Committee Member, Peer Review. (August 2012 - May 2013).

Service – College

Committee Member, Advisory Committee. (August 26, 2013 - Present).

Service – University

Committee Member, Ad Hoc General Studies Assessment Committee. (August 2012 - December 2012).

Nickolas J. Hein
Mathematics
Email: HEINNJ@UNK.EDU

Academic Degrees

PhD, Texas A&M University, 2013.

Major: Mathematics

Supporting Areas of Emphasis: Algebraic Geometry

Dissertation Title: Reality and Computation in Schubert Calculus

MA, The University of Kansas, 2006.

Major: Mathematics

Supporting Areas of Emphasis: Algebraic Geometry

Dissertation Title: The Riemann-Roch Theorem for Compact Riemann Surfaces

BA, The University of Kansas, 2003.

Major: Mathematics

Supporting Areas of Emphasis: Algebraic Geometry

Dissertation Title: The Insolvability of the Quintic

Administrative Data – Permanent

Starting Rank: Assistant Professor

Start Date at University of Nebraska at Kearney: August 19, 2013

Date Attained Rank of Assistant Professor: August 19, 2013

Academic, Government, Military and Professional Positions

Teaching Assistant/Research Assistant, Texas A&M University, Academic - Post-Secondary. (September 1, 2006 - August 1, 2013).

Graduate Teaching Assistant, The University of Kansas, Academic - Post-Secondary. (September 1, 2003 - August 1, 2006).

Awards and Honors

Travel Grant, National Science Foundation, Scholarship/Research, International. (June 1, 2013).

Travel Grant, American Mathematical Society, Scholarship/Research, National. (January 1, 2013).

Travel Grant, National Science Foundation, Scholarship/Research, International. (July 1, 2012).

Travel Grant, University of Iowa, Scholarship/Research, National. (April 1, 2012).

Travel Grant, National Science Foundation, Scholarship/Research, International. (February 1, 2011).

Travel Grant, American Institute of Mathematics, Scholarship/Research, National. (October 1, 2010).

Teaching

Scheduled Teaching

Fall 2013

MATH 102, College Algebra, 3 credit hours, 45 students enrolled, On Campus.

MATH 115, Calculus I w/Analytic Geometry, 5 credit hours, 16 students enrolled, On Campus.

Spring 2014

MATH 102, College Algebra, 3 credit hours, 44 students enrolled, On Campus.

MATH 123, Applied Calculus I, 3 credit hours, 32 students enrolled, On Campus.

MATH 440, Linear Algebra, 3 credit hours, 14 students enrolled, On Campus.

Summer 2014

MATH 871, Topics in Math, 3 credit hours, 8 students enrolled, Web Based.

Fall 2014

MATH 115, Calculus I w/Analytic Geometry, 5 credit hours, On Campus.

MATH 310, College Geometry, 3 credit hours, On Campus.

Directed Student Learning

Supervised Research - UGRD, Mathematics. (March 1, 2014 - Present).
Advised: William Broeckelman

Scholarship

Intellectual Contributions

Hein, N. J., Hillar, C. J., Sottile, F. (2014). Lower bounds in real Schubert calculus. *To appear in Sao Paulo Journal of Mathematical Sciences, 7*(1), 33-58. www.ime.usp.br/~resenhas/SPjournalmathsci/

Hein, N. J., Garcia-Puente, L., Christopher, H., Martin del Campo, A., Ruffo, J., Sottile, F., Teitler, Z. (2012). The secant conjecture in the real Schubert calculus. *Experimental Mathematics, 21*(3), 252-265. http://www.tandfonline.com/

Presentations

Hein, N. J. (Author & Presenter). Perspectives of Modern Complex Analysis, "Lower bounds in real Schubert Calculus," Institute of Mathematics Polish Academy of Sciences, Bedlewo, PL. (July 22, 2014).

Hein, N. J. Algebra Seminar, "Intersections of Schubert Varieties as Local Complete Intersections," Kansas State University, Manhattan, KS. (November 11, 2013).

Hein, N. J. (Author & Presenter). Mathematics Colloquium, "Frontiers in Schubert Calculus," University of Nebraska at Lincoln, Lincoln. (September 27, 2013).

Hein, N. J. (Author & Presenter). SIAM Conference on Applied Algebraic Geometry, "Certifiable Numerical Computations in Schubert Calculus," Society for Industrial and Applied Mathematics, Fort Collins. (August 1, 2013).

Hein, N. J. (Author & Presenter). Effective Methods in Algebraic Geometry, "Certifiable Numerical Computations in Schubert Calculus," European Science Foundation, Frankfurt. (June 4, 2013).

Hein, N. J. (Author & Presenter). Joint Mathematics Meetings, "Numerical Methods for Solving Schubert Problems," American Mathematical Society and Mathematical Association of America, San Diago. (January 12, 2013).

Service

Service – Department

Committee Member, Hiring Search. (September 24, 2013 - April 24, 2014).

Service – College

Committee Member, Hiring for Workstation Support Specialist. (October 1, 2013 - Present).

Service – Professional

Reviewer, Conference Paper, Mathematical Society of Japan, Tokyo. (January 23, 2013 - Present).

Dr. Pari L. Ford
Mathematics
(308) 865-8553
Email: fordpl@unk.edu

Academic Degrees

PhD, University of Nebraska-Lincoln, 2008.
Major: Mathematics
Dissertation Title: The Polynomial LYM Inequality and an Association Scheme on a Lattice
MS, University of Nebraska-Lincoln, 2002.
Major: Mathematics
BS, University of Nebraska at Kearney, 2000.
Major: Mathematics

Administrative Data – Permanent

Starting Rank: Assistant Professor
Start Date at University of Nebraska at Kearney: August 18, 2008
Date Attained Rank of Assistant Professor: August 18, 2008

Teaching

Scheduled Teaching

Fall 2010

MATH 101, Intermed Algebra, 3 credit hours, 40 students enrolled, On Campus.
MATH 310, College Geometry, 3 credit hours, 6 students enrolled, On Campus.
MATH 310H, College Geometry, 3 credit hours, 1 students enrolled, On Campus.
MATH 470, Tchg of Sec Math, 3 credit hours, 10 students enrolled, On Campus.
MATH 870P, Tchg of Sec Math, 3 credit hours, 1 students enrolled, On Campus.

Spring 2011

MATH 104, Concepts In Math and Stat, 3 credit hours, 23 students enrolled, On Campus.
MATH 230, Math Elem Tchrs I, 3 credit hours, 21 students enrolled, On Campus.
MATH 430, Middle School Math, 3 credit hours, 10 students enrolled, On Campus.
MATH 430H, Middle School Math, 3 credit hours, 1 students enrolled, On Campus.

Summer 2011

MATH 310, College Geometry, 3 credit hours, 1 students enrolled, On Campus.
MATH 811, Topics in Geom for Sec Sch Thr, 3 credit hours, 23 students enrolled, Web Based.

Fall 2011

MATH 104, Concepts in Math & Statistics, 3 credit hours, 27 students enrolled, On Campus.
MATH 400, History of Math, 3 credit hours, 10 students enrolled, On Campus.
MATH 400H, History of Math, 3 credit hours, 1 students enrolled, On Campus.
MATH 470, Teaching of Secondary Math, 3 credit hours, 6 students enrolled, On Campus.
MATH 470H, Teaching of Secondary Math, 3 credit hours, 1 students enrolled, On Campus.

MATH 800P, History of Math, 3 credit hours, 1 students enrolled, On Campus.

Spring 2012

MATH 230, Math for Elementary Teachers I, 3 credit hours, 35 students enrolled, On Campus.
MATH 230H, Math for Elementary Teachers I, 3 credit hours, 1 students enrolled, On Campus.
MATH 330, Math for Elem Teachers II, 3 credit hours, 12 students enrolled, Web Based.
MATH 430, Middle School Math, 3 credit hours, 11 students enrolled, On Campus.

Summer 2012

MATH 815, Topics in Discrete Mathematics, 3 credit hours, 20 students enrolled, Web Based.

Fall 2012

MATH 123, Applied Calculus I, 3 credit hours, 40 students enrolled, On Campus.
MATH 123, Applied Calculus I, 3 credit hours, 38 students enrolled, On Campus.
MATH 230, Math for Elementary Teachers I, 3 credit hours, 32 students enrolled, On Campus.
MATH 470, Teaching of Secondary Math, 3 credit hours, 12 students enrolled, On Campus.

Spring 2013

MATH 102, College Algebra, 3 credit hours, 45 students enrolled, On Campus.
MATH 103, Plane Trigonometry, 3 credit hours, 36 students enrolled, On Campus.
MATH 230, Math for Elementary Teachers I, 3 credit hours, 12 students enrolled, Web Based.
MATH 430, Middle School Math, 3 credit hours, 8 students enrolled, On Campus.

Fall 2013

MATH 101, Intermediate Algebra, 3 credit hours, 44 students enrolled, On Campus.
MATH 101, Intermediate Algebra, 3 credit hours, 43 students enrolled, On Campus.
MATH 400, History of Math, 3 credit hours, 10 students enrolled, On Campus.
MATH 400H, History of Math, 3 credit hours, 1 students enrolled, On Campus.
MATH 470, Teaching of Secondary Math, 3 credit hours, 11 students enrolled, On Campus.
MATH 470H, Teaching of Secondary Math, 3 credit hours, 3 students enrolled, On Campus.

Spring 2014

MATH 102, College Algebra, 3 credit hours, 45 students enrolled, On Campus.
MATH 106, Mathematics for Liberal Arts, 3 credit hours, 22 students enrolled, On Campus.
MATH 230, Math for Elementary Teachers I, 3 credit hours, 9 students enrolled, Web Based.
MATH 430, Middle School Math, 3 credit hours, 10 students enrolled, On Campus.

Summer 2014

MATH 871, Topics in Math, 3 credit hours, 13 students enrolled, Web Based.

Fall 2014

MATH 104, Concepts in Math & Statistics, 3 credit hours, On Campus.
MATH 230, Math for Elementary Teachers I, 3 credit hours, On Campus.

MATH 400, History of Math, 3 credit hours, On Campus.

MATH 400H, History of Math, 3 credit hours, On Campus.

MATH 470, Teaching of Secondary Math, 3 credit hours, On Campus.

MATH 470H, Teaching of Secondary Math, 3 credit hours, On Campus.

Directed Student Learning

Supervised Research - UGRD, "Optimization of Sanitation Routes," Mathematics. (September 2011 - April 2012). Advised: Alicia Titus

Thompson Scholars, "The Appeal of the Golden Ratio." (September 2010 - February 2011). Advised: Erin Nelson

Scholarship

Intellectual Contributions

Ford, P. L., Strawhecker, J. E. (2011). Co-teaching math content and math pedagogy for elemenatry pre-service teachers: a pilot study. *IUMPST: The Journal*. www.k-12prep.math.ttu.edu/journal/pedagogy/ford01/article.pdf

Presentations

Ford, P. L. Kansas City Regional Mathematics Technology EXPO, "Flipping a Math Content Course for Pre-Service Elementary Teachers using Video, YouTube, and iPad apps," Kansas City, MO. (October 4, 2013).

Ford, P. L. MathFest, "Flipping Fun," Mathematical Association of America (MAA), Hartford, CT. (August 2013).

Ford, P. L. Joint Section Meeting for the Mathematical Association of America, "Flipping Fun," Mathematical Association of America (MAA), Marysville, MO. (April 2013).

Ford, P. L. Circles on the Road, "To Park or Not to Park: Parking Sequences," Mathematical Sciences Research Institute, Washington, D.C. (April 2012).

Ford, P. L. University of South Dakota Math Days for Women, "Introduction to Graph Theory: Series-Parallel Graphs," University of South Dakota, Vermillion, SD. (January 2010).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Nebesniak, A. L. (Co-Principal), Ford, P. L. (Co-Principal), "Pre-Service Mathematics Teacher Conference," Grant, Sponsored by Department of Teacher Education - Program of Excellence Award, University of Nebraska at Kearney, $4,500.00. (January 2015 - May 1, 2015).

Service

Professional Memberships

Association for Women in Mathematics. (September 2009 - Present).

1st VP, 2nd VP, President, Past President, Nebraska Association of Teachers of Mathematics. (August 2008 - Present).

Project NExT. (August 2008 - Present).

Governor, Mathematics Association of America. (2008 - Present).

National Council of Teachers of Mathematics. (April 2006 - Present).

Academic Advising

2011-2012

Undergraduate Students Advised: 14

Graduate Students Advised: 8

2012-2013

Undergraduate Students Advised: 14

Graduate Students Advised: 3

2013-2014

Undergraduate Students Advised: 9

Graduate Students Advised: 8

Service – Department

Committee Member, Search Committee for Math Department. (October 2013 - Present).

Faculty Advisor, Math Club. (August 2009 - Present).

Committee Chair, Search Committee for Math Department (Math Ed Position). (September 2012 - April 2013).

Service – College

Committee Member, Ed Policy Committee. (August 2013 - Present).

Service – University

volunteer tutor in the Learning Commons, Math in the Afternoon with Dr. Pari Ford. (September 2012 - Present).

Faculty Advisor, Yoga Community. (September 2012 - Present).

Committee Member, UNK Advisory Council on Teacher Education. (October 2010 - Present).

Committee Member, Women's and Gender Studies Advisory Council. (September 2010 - Present).

Committee Member, Advisory Board for the Academic Success Offices. (September 2009 - Present).

Committee Member, Chancellor's Advisory Council on Gender Equity. (September 2009 - Present).

Committee Member, Science/Math Education M.S.Ed. committee. (September 2008 - Present).

Committee Member, Search Committe for a co-director of the Learning Commons. (April 2013 - August 2013).

Service – Professional

Program Organizer, Central Nebraska Math Teachers' Circle, Kearney, NE. (September 2008 - Present).

Nebraska/SE South Dakota Section Governor, Mathematical Association of America, Nebraska. (July 1, 2011 - June 30, 2014).

Officer, President/Elect/Past, Nebraska Association of Teachers of Mathematics, Nebraska. (January 1, 2010 - December 31, 2013).

Invited participant, Kansas City Regional Math Leadership, Kansas City, MO. (February 15, 2013).

Committee Member, Nebraska Department of Education, Ad-Hoc Committee on Rule 24, Lincoln, NE. (February 16, 2012).

Chairperson, Nebraska/SE South Dakota section of the MAA, Kearney, NE. (April 8, 2011 - April 9, 2011).

Reviewer, Ad Hoc Reviewer, NCATE, Lincoln, NE. (November 2010).

Jose L. Mena-Werth
Physics
Email: werthj@unk.edu

Administrative Data – Permanent

Starting Rank: Associate Professor
Start Date at University of Nebraska at Kearney: August 17, 1992
Date Attained Rank of Associate Professor: August 17, 1998
Date Attained Rank of Full Professor: August 16, 2004
Tenure Decision Date: August 1, 1998

Teaching

Scheduled Teaching

Fall 2010

PHYS 210, Astronomy, 3 credit hours, 58 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 34 students enrolled, On Campus.
PHYS 210H, Astronomy, 3 credit hours, 1 students enrolled, On Campus.
PHYS 471, Meth Sec Sci Tchg, 3 credit hours, 4 students enrolled, On Campus.

Spring 2011

PHYS 100, Physical Science, 3 credit hours, 41 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 38 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 38 students enrolled, On Campus.
PHYS 811, Astronomy for HS Teachers, 3 credit hours, 1 students enrolled, On Campus.

Fall 2011

PHYS 100L, Physical Science Laboratory, 1 credit hours, 19 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 32 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 60 students enrolled, On Campus.
PHYS 211, Planetary Astronomy, 3 credit hours, 6 students enrolled, On Campus.

Spring 2012

PHYS 100, Physical Science, 3 credit hours, 46 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 28 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 27 students enrolled, On Campus.

Summer 2012

PHYS 811, Astronomy for HS Teachers, 3 credit hours, 12 students enrolled, Web Based.
PHYS 811, Astronomy for HS Teachers, 0 credit hours, 12 students enrolled, On Campus.

Fall 2012

PHYS 100, Physical Science, 3 credit hours, 47 students enrolled, On Campus.
PHYS 100, Physical Science, 3 credit hours, 21 students enrolled, On Campus.

PHYS 100L, Physical Science Laboratory, 1 credit hours, 20 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 45 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 60 students enrolled, On Campus.

Spring 2013

PHYS 100, Physical Science, 3 credit hours, 24 students enrolled, On Campus.
PHYS 100, Physical Science, 3 credit hours, 47 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 26 students enrolled, On Campus.
PHYS 301, Advanced Physical Science, 4 credit hours, 12 students enrolled, On Campus.
PHYS 301, Advanced Physical Science, 0 credit hours, 12 students enrolled, On Campus.

Fall 2013

PHYS 100, Physical Science, 3 credit hours, 49 students enrolled, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, 21 students enrolled, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, 21 students enrolled, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, 26 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 36 students enrolled, On Campus.
PHYS 800, Advanced Physical Science, 3 credit hours, 18 students enrolled, Web Based.
PHYS 800, Advanced Physical Science, 0 credit hours, 18 students enrolled, Web Based.

Spring 2014

PHYS 100, Physical Science, 3 credit hours, 41 students enrolled, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, 21 students enrolled, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, 21 students enrolled, On Campus.
PHYS 210, Astronomy, 3 credit hours, 33 students enrolled, On Campus.
PHYS 301, Advanced Physical Science, 4 credit hours, 5 students enrolled, On Campus.
PHYS 301, Advanced Physical Science, 0 credit hours, 5 students enrolled, On Campus.
PHYS 301H, Advanced Physical Science, 4 credit hours, 1 students enrolled, On Campus.
PHYS 301H, Advanced Physical Science, 0 credit hours, 1 students enrolled, On Campus.

Fall 2014

PHYS 100, Physical Science, 3 credit hours, On Campus.
PHYS 100, Physical Science, 3 credit hours, On Campus.
PHYS 100, Physical Science, 3 credit hours, On Campus.
PHYS 100L, Physical Science Laboratory, 1 credit hours, On Campus.
PHYS 210, Astronomy, 3 credit hours, On Campus.

Kenneth W. Trantham
Physics
(308) 865-8278
Email: tranthamkw@unk.edu

Academic Degrees

PhD, University of nebraska lincoln, 1900.

Major: physics

Dissertation Title: electron dichroism in champhor

MS, university of missouri, rolla, 1900.

Major: physics

Dissertation Title: nobel gas electron spin polarimeter

Administrative Data – Permanent

Starting Rank: Associate Professor

Start Date at University of Nebraska at Kearney: August 17, 2009

Date Attained Rank of Associate Professor: August 17, 2009

Tenure Decision Date: August 17, 2009

Academic, Government, Military and Professional Positions

Military.

Awards and Honors

Honorary Induction, XiPhi Mortar Board. (April 11, 2014).

Teaching

Scheduled Teaching

Fall 2010

PHYS 205, Gen Physics, 5 credit hours, 46 students enrolled, On Campus.

PHYS 388, GS Capstone, 3 credit hours, 2 students enrolled, On Campus.

PHYS 388L, GS Capstone Lab, 1 credit hours, 2 students enrolled, On Campus.

PHYS 401, Analytic Mechanics II, 3 credit hours, 1 students enrolled, On Campus.

Spring 2011

PHYS 206, Gen Physics, 4 credit hours, 41 students enrolled, On Campus.

PHYS 323, Intro Electron, 4 credit hours, 9 students enrolled, On Campus.

PHYS 323H, Introductory Electronics, 4 credit hours, 2 students enrolled, On Campus.

Summer 2011

PHYS 206, General Physics, 4 credit hours, 14 students enrolled, On Campus.

PHYS 206L, Physics Laboratory II, 1 credit hours, 14 students enrolled, On Campus.

Fall 2011

PHYS 205, Physics I, 4 credit hours, 49 students enrolled, On Campus.

PHYS 323, Introductory Electronics, 4 credit hours, 3 students enrolled, On Campus.

PHYS 323, Introductory Electronics, 0 credit hours, 3 students enrolled, On Campus.

PHYS 388, GS Capstone, 3 credit hours, 2 students enrolled, On Campus.
PHYS 388L, GS Capstone Lab, 1 credit hours, 2 students enrolled, On Campus.
PHYS 400, Analytic Mechanics I, 3 credit hours, 2 students enrolled, On Campus.

Spring 2012
PHYS 206, General Physics II, 4 credit hours, 32 students enrolled, On Campus.
PHYS 401, Analytic Mechanics II, 3 credit hours, 2 students enrolled, On Campus.
PHYS 498, Senior Seminar in Physics, 3 credit hours, 2 students enrolled, On Campus.
PHYS 800, Advanced Physical Science, 3 credit hours, 1 students enrolled, On Campus.

Summer 2012
PHYS 206, General Physics II, 4 credit hours, 10 students enrolled, On Campus.
PHYS 206L, Physics Laboratory II, 1 credit hours, 9 students enrolled, On Campus.

Fall 2012
PHYS 323, Analog and Digital Electronics, 3 credit hours, 8 students enrolled, On Campus.
PHYS 323, Analog and Digital Electronics, 0 credit hours, 8 students enrolled, On Campus.
PHYS 388, GS Capstone, 3 credit hours, 5 students enrolled, On Campus.
PHYS 388L, GS Capstone Lab, 1 credit hours, 5 students enrolled, On Campus.
PHYS 498, Senior Seminar in Physics, 3 credit hours, 1 students enrolled, On Campus.

Spring 2013
PHYS 100L, Physical Science Laboratory, 1 credit hours, 24 students enrolled, On Campus.
PHYS 206, General Physics II, 4 credit hours, 9 students enrolled, On Campus.
PHYS 435, Solid State Physics, 3 credit hours, 3 students enrolled, On Campus.

Summer 2013
PHYS 206L, Physics Laboratory II, 1 credit hours, 3 students enrolled, On Campus.

Fall 2013
PHYS 323, Analog and Digital Electronics, 3 credit hours, 5 students enrolled, On Campus.
PHYS 323, Analog and Digital Electronics, 0 credit hours, 5 students enrolled, On Campus.
PHYS 388, GS Capstone, 3 credit hours, 5 students enrolled, On Campus.
PHYS 388L, GS Capstone Lab, 1 credit hours, 5 students enrolled, On Campus.

Spring 2014
PHYS 100, Physical Science, 3 credit hours, 39 students enrolled, On Campus.
PHYS 420, Adv Lab, 3 credit hours, 2 students enrolled, On Campus.
PHYS 498, Senior Seminar in Physics, 3 credit hours, 1 students enrolled, On Campus.

Fall 2014
PHYS 275, General Physics I (Calc), 4 credit hours, On Campus.
PHYS 323, Analog and Digital Electronics, 3 credit hours, On Campus.

PHYS 323, Analog and Digital Electronics, 0 credit hours, On Campus.

Scholarship

Presentations

Trantham, K. W. (Author). BCCE 2014, "Brewing Science as a General Studies class.," http://www.bcce2014.org/, Amhurst MI. (August 12, 2014).

Trantham, K. W. •Xi Phi Chapter of Mortar Board “Last Lecture”. (March 2012).

Contracts, Fellowships, Grants, and Sponsored Research

Funded

Trantham, K. W. (Principal), "“Public awareness of Science through Astrophotography”," Grant, Sponsored by NASA Nebraska Space Grant, State, $11,607.00. (September 2013 - April 2014).

Trantham, K. W., "American physical society Division of Laser Science Distinguished Lecture Award Grant. (Eric Cornell, 2001 Nobel Laureate)," Grant, Other. (April 3, 2013).

Service

Administrative Assignments

Department Chairperson, Department. (August 1, 2002 - Present).

Academic Advising

2011-2012

Undergraduate Students Advised: 40

Service – Department

Committee Chair, Search committee. (2012).

Service – College

willing participant, Health Science Pie Canned Food Drive. (November 2013).

Committee Chair, CNSS advisory Committee. (2012 - April 2013).

participant/presenter, Looser Preview Day. (January 29, 2013).

Developed interactive display for 2012 State Fair Week. (air xylophone). (2012).

CNSS representative for Donguk and Hanyang University visit, Seoul Korea, November 2012. (November 2012).

Service – University

Committee Member, Learning Commons Advisory Committee. (2012 - Present).

Committee Member, Representative to the Nebraska Academy of Science annual meeting. (2011 - Present).

Committee Member, UNK Academic Appeals Committee. (2009 - Present).

Committee Chair, Astrophotgraphy. (August 2014 - December 2014).

Faculty Welcome Presentation., Blue and Bold Welcome Week. (August 23, 2014).

Committee Chair, Faculty Senate President. (April 2013 - April 2014).

Campus Fee Committe. (November 2013 - March 2014).

Committee Member, Coordinator of Academic Publications Search Committee. (November 2013 - February 2014).

PHYSICS HELP NIGHT. (December 2012 - December 2013).

Committee Member, General Studies Council (Daren Snider, Chair). (2011 - 2013).

Faculty Senate President Elect (Fall 2012). (April 2012 - April 2013).

Committee Chair, Professional Conduct committee. (April 2011 - April 2013).

Committee Member, Assessment Director Search. (November 2012 - March 2013).

Campus Fee Committee. (2012).

Faculty Senate President Secretary (spring 2012). (2012).

Committee Member, NCA Criterion #3 Team member. (2012).

UNK representative on NU UARC site visits. (traveled to Penn St. and Utah St.). (2012).

Committee Chair, Peter Kiewit/Walter Scott selection committee (Chair 2012. 2/28/12). (February 2012).

Service – Professional

Nebraska Junior Academy of Sciences conference, Spring 2012. (April 2012).

Served as competition judge at the 2012 First Lego League area competition held at Kearney Catholic Saturday 1/7/2012. (February 2012).

Service – Public

Committee Member, Nebraska Junior Acadamy of Science, Nebraska. (2012 - Present).

Committee Member, NASA Space Grant Technical Advisory Committee, Nebraska. (2009 - Present).

Other

Faculty Development Activities Attended

Conference Attendance, "APS Chairs Conference," APS. American Physical Society, Virgin, National. (May 31, 2013).

Workshop, "Critical Thinking Workshop," General Studies & Office of Assesement, D Snyder, Local. (May 16, 2013).

Teacher Education Faculty

Anderson, Kenneth

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – January 8, 2001
Date Attained Associate Professor – August 13, 2012

Academic, Government, Military, and Professional Positions
Superintendent – Hastings Public Schools
Superintendent – Kearney Public Schools
Adjunct Instructor – UNK
Adjunct Lecturer – UNK
Associate Professor/Department Chair – UNK
Lecturer – UNK

Administrative Assignments
Department Chairperson

Education
BA – North Park College – Educational Psychology
MS – UNO – Educational Psychology
PhD – UNL – Administration, Curriculum, and Instruction

Scheduled Teaching (since August 2010)
TE 100 / TE 188 / TE 498 / TE 800 / TE 803 / TE 816A / TE 896 / TE 898 / TE 899P / TESE 421 / TESE 821P

Bruner, Patricia

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – August 15, 2011

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
BSEd – Wayne State College – Elementary Education – 1972
MA – UNO – Curriculum Development – 1980

Scheduled Teaching (since August 2010)
TE 204 / TE 318 / TE 331 / TE 408 / TE 472 / TE 473 / TE 808P / TE 809P

Crow, Sherry

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – August 14, 2006
Date Attained Assistant Professor – August 18, 2008
Date Attained Associate Professor – August 19, 2013

Academic, Government, Military, and Professional Positions
Children's Librarian and Department Head – Hays Public Library
Lecturer – Fort Hays State University
Senior Librarian – West Milford Township Public Library
Literature Specialist – University Center for Gifted Children
Children's Librarian and Department Head – Pequannock Public Library
Reference and Audio-Visual Librarian – Schamburg Township District Library
Library Media Specialist- Hawthorn School District
Adjunct Professor – Emporia State University
Library Technology Educator – Colorado Springs School District 11
Adjunct Professor – University of Colorado at Denver

Administrative Assignments
N/A

Education
BS – Fort Hays State University – Elementary Education
MS – Brigham Young University – Library Science
PhD – Emporia State University – Library and Information Management

Scheduled Teaching (since August 2010)
TE 867 / TE 869 / TE 871 / TE 873 / TE 875 / TE 893 / TE 899P

Earls, Jennifer (part-time)

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
N/A

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
BS – Southern Illinois University – Biological Science, Secondary Education Concentration
MS – Southern Illinois University – Curriculum and Instruction, Science and Environmental Education
PhD – Southern Illinois University – Curriculum and Instruction, Instructional Technology

Scheduled Teaching (since August 2010)
TE 800 / TE 874

Fredrickson, Scott

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Professor
Start Date at UNK – August 17, 1992
Date Attained Full Professor – August 15, 2000
Tenure Decision Date – August 1, 1998

Academic, Government, Military, and Professional Positions
Clerical – Federal Bureau of Investigation
Sergeant – US Air Force
First Lieutenant – US Army
Deputy Sheriff – Lubbock Sheriff's Office
Computer Science/History/Geography Teacher/Football Coach – Lubbock ISD
Assistant Professor – University of Alaska Southeast
Assistant Professor/Associate Professor/Professor – UNK

Administrative Assignments
Coordinator

Education
EdD – Texas Tech University – Instructional Technology

Scheduled Teaching (since August 2010)
TE 810 / TE 868 / TE 870 / TE 877 / TE 878 / TE 880 / TE 881 / TE 882 / TE 884 / TE 885 / TE 887 / TE 889 / TE 891 / TE 896

Gaskill, Martonia

Personal & Contact Info
Female / Hispanic-Latino of Any Race

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – August 13, 2012

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
Med – UNK – Instructional Technology
PhD – UNL – Instructional Technology

Scheduled Teaching (since August 2010)
TE 206 / TE 803 / TE 886P

Hansen, Tom

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Associate Professor
Start Date at UNK – August 24, 1989
Date Attained Associate Professor – August 14, 1995
Tenure Decision Date – August 1, 1995

Academic, Government, Military, and Professional Positions
Elementary Teacher – Frederick Public School System
Elementary Teacher – Jackson Public School System
Remedial Reading Teacher – Estelline Public School System
Elementary Teacher – Watertown Public School District
Elementary Principal – Canistota Public School
Instructor – Sioux Falls College
Elementary Principal – Tri-Valley School District
Graduate Assistant Instructor – University of South Dakota
Associate Professor - UNK

Administrative Assignments
N/A

Education
BA – Northern State College – Elementary Education
MEd – South Dakota State University – Guidance and Counseling
Med – South Dakota State University – Elementary Administration
EdD – University of South Dakota - Reading

Scheduled Teaching (since August 2010)
TE 206 / TE 816B / TE 845 / TE 846 / TE 850 / TE 853C / TE 854 / TE 897

Lilienthal, Linda

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Assistant Professor
Start Date at UNK – August 13, 2012
Date Attained Assistant Professor – August 13, 2012

Academic, Government, Military, and Professional Positions
Instructor – Midwestern State University
Assistant Professor – Midwestern State University
Assistant Professor – UNK

Administrative Assignments
Coordinator
Director

Education
BA – Kearney State College – Elementary Education
MA – UNK – Elementary Education
EdD – University of Northern Colorado – Educational Studies, Elementary Education, Reading

Scheduled Teaching (since August 2010)
TE 314 / TE 315 / TE 317 / TE 809 / TE 816A / TE 816B / TE 846 / TE 897

Mishou, Robert (part-time)

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – June 5, 2006

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
BA – UNK – Education
MA – UNK – Curriculum & Instruction

Scheduled Teaching (since August 2010)
TE 803

Nielsen, Diane (part-time)

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – July 7, 2008

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
MS – Kearney State College
PhD – UNL – Administration, Curriculum & Instruction

Scheduled Teaching (since August 2010)
TE 804

Potthoff, Dennis

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Associate Professor
Start Date at UNK – August 19, 1996
Date Attained Rank of Full Professor – August 18, 2003
Tenure Decision Date – August 1, 1998

Academic, Government, Military, and Professional Positions
Junior High School Studies Teacher – Lexington Junior High School
7th Grade Social Studies/Basic Studies Teacher – Lincoln Lefler Junior High School
Middle School Social Studies Teacher – Rideau Valley Middle School
Secondary 7-12 Social Studies Teacher – Wilber-Clatonia Schools
Assistant Professor – Wichita State University

Administrative Assignments
Associate Dean
Coordinator
Department Chairperson

Education
BS – UNL – Social Science Education (7-12)
MSEd – UNL – Curriculum & Instruction
PhD – UNL – Administration, Curriculum & Instruction

Scheduled Teaching (since August 2010)
TE 100 / TE 803 / TE 850 / TE 899P

Renner, Carol

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
N/A

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
BA – Fonbonne College – Foreign Language in the Elementary School
MAEd – University of Missouri-Columbia – Learning Disabilities (Special Education)
Other – Specialist in Education – UNL – Educational Administration
PhD – UNL – Administration, Curriculum and Instruction

Scheduled Teaching (since August 2010)
TE 817P / EDAD 831

Saulsbury, Ashley (part-time)

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
N/A

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
N/A

Scheduled Teaching (since August 2010)
TE 311 / TE 313 / TE 316 / TE 408 / TE 808P / TE 897

Tracy, Glenn

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Assistant Professor
Start Date at UNK – August 16, 1999
Date Attained Associate Professor – August16, 2004
Tenure Decision Date – August 16, 2005

Academic, Government, Military, and Professional Positions
N/A

Administrative Assignments
N/A

Education
MA – Truman State University – English
EdD – Oklahoma State University – Curriculum & Instruction

Scheduled Teaching (since August 2010)
TE 100 / TE 188 / TE 204 / TE 327 / TE 328 / TE 329 / TE 408 / TE 804 / TE 807P / TE 808P / TE 825 / TE 826

Vu, Phu

Personal & Contact Info
Male / Asian

Administrative Data – Permanent Data
Starting Rank – Assistant Professor
Start Date at UNK – August 19, 2013

Academic, Government, Military, and Professional Positions
Founder and Executive Manager – E-Center for Professional Development
Assistant Professor – UNK
Distinguished Program Committee Member – Association for Teacher Educators
Editorial Board Member – International Journal of 21st Century Education

Administrative Assignments
N/A

Education
PhD – Southern Illinois University Carbondale – Curriculum and Instruction

Scheduled Teaching (since August 2010)
TE 206 / TE 876 / TE 866P

West, Camie

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Lecturer
Start Date at UNK – August 15, 2011

Academic, Government, Military, and Professional Positions
Summer School Teacher – Kearney Public Schools
K-6 Special Education Teacher/Behavior Interventionist – Lexington Public Schools
K-12 Special Education Teacher – Elm Creek Public Schools
7-12 Special Education Teacher – Elm Creek Public Schools
Adjunct – UNK
Lecturer – UNK

Administrative Assignments
N/A

Education
BAEd – Kearney State College – Elementary Education & Special Education K-6
Other – Additional Endorsement – UNK – Special Education 7-12
MAEd – UNK – Special Education-Specific Learning Disabilities

Scheduled Teaching (since August 2010)
TE 204 / TE 805P / TESE 421 / TESE 463 / TESE 464 / TESE 468 / TESE 821P / TESE 864P

Wojcik, Brian

Personal & Contact Info
Male / White

Administrative Data – Permanent Data
Starting Rank – Assistant Professor
Start Date at UNK – August 19, 2013

Academic, Government, Military, and Professional Positions
Teacher of Students with Multiple Needs – Illinois State University Laboratory Schools
Teacher of Students with Emotional and Behavior Disorders – Olympia High School and Middle School
Resource/Inclusion Teacher – West-Lincoln Boardwell Elementary
Special Education Assistive Technology Center Coordinator – Illinois State University

Administrative Assignments
N/A

Education
BSEd – Illinois State University – Deaf and Hard of Hearing; Elementary Education
MSEd – Illinois State University – Special Education – Learning Disabilities/Behavior Disorders
EdD – Illinois State University – Special Education and Assistive Technology

Scheduled Teaching (since August 2010)
TE 804 / TE 805P / TESE 430 / TESE 463 / TESE 831 / TESE835 / TESE 863 / TESE 867

Ziebarth, Jane

Personal & Contact Info
Female / White

Administrative Data – Permanent Data
Starting Rank – Assistant Professor
Start Date at UNK – August 24, 1984
Date Attained Rank of Associate Professor – August 17, 2009
Tenure Decision Date – August 1, 2002

Academic, Government, Military, and Professional Positions
Research Intern – United State Senate
Director – Nebraska Department of Education

Administrative Assignments
N/A

Education
BAEd – Kearney State College – Social Science
MAEd – UNK – Comprehensive Degree in Social Science
PhD – UNL – Administration, Curriculum and Instruction

Scheduled Teaching (since August 2010)
TE 100 / TE 408 / TE 808P / TE 815P