Nebraska Department of Education Rule 24 Report

SCIENCE (7-12)

(Content Area)

Educator Preparation Content Program Review

Name of institution	**Chadron State College**
Date Submitted	**December 1st, 2025**
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Folio type: [ ] **Regular** [X] **Mini** [ ] **Advanced Program**

Program(s) Covered by this Folio

Endorsement(s)	Type	Grade Level	Program Level
	Subject Field Supplemental	PK-12 6-12 7-12	Baccalaureate Post-Baccalaureate Master's
List Endorsements	Low-Enrollment	Etc.	Etc.
Science	**Field**	**7-12**	Baccalaureate/ Post Bac

Is the endorsement offered at more than one site? [ ] **Yes** [X] **No**

If yes, list additional sites where endorsement is offered:

Institution Accreditation Status: [X] National [X] State

Is this a Nationally Accredited Program? [ ] Yes [X] No

If Yes, list Accrediting Organization: Attach National Letter to Cover Sheet

Introduction/Welcome

Thank you for taking the time to review our program. Please refer to the catalog for any additional information that you might need.

If you have problems with the links or navigation through this site, contact Katie Rust 308-432-6337, Stef VanVleet 308-432-6383, or Adam Fette 308-432-6469 during working hours. After working hours (remember we are on Mountain Standard Time), contact us via email which we will check regularly in the evening hours.

Section 1: Contextual Information

1a. Contextual Information

Chadron State College
Chadron State College (CSC) was originally authorized by the State of Nebraska as a Normal School in 1911. It has evolved into a comprehensive college with a wide range of undergraduate and graduate programs. Chadron State is accredited by the Higher Learning Commission, as well as subject-oriented accrediting agencies. From its modest beginning, Chadron State College has evolved into a rapidly growing multipurpose institution of higher education. Located in the scenic Pine Ridge region of northwest Nebraska, the college serves the intellectual, cultural, and recreational needs of western Nebraska.

Chadron State College's academic organizational structure consists of three schools, each under the leadership of an academic dean. The three schools are: (1) Business, Mathematics and Sciences; (2) Liberal Arts; and (3) Professional Studies and Applied Sciences (PSAS). Education is housed within the school of Professional Studies and Applied Sciences. The dean of PSAS and department chair provide the leadership for the Education Department. Throughout this document, the education unit is referred to as the Educator Preparation Program (EPP). The EPP includes both the education program and specialized content area programs that prepare educators.

Educator Preparation Program
At the initial level, the Educator Preparation Program (EPP) supports twelve field endorsements, eight subject endorsements, and five supplemental endorsement programs. At the advanced level, the EPP supports five endorsements. The EPP works cooperatively with the content disciplines, assuring that the teacher candidates have the knowledge, skills, and dispositions necessary for professional teaching. The Education Department assures that all State and accreditation requirements are met and regularly shares data and ideas for the improvement of the overall education programs through the EPP committee. The EPP is led by the education program's department chair and composed of faculty from the education program, teacher educator representatives from the varying disciplines across campus, ESU #13 staff, and area P-12 professionals. The disciplines represented include Business, Mathematics, Family and Consumer Sciences, Science, Social Studies, Health-Physical Education, English/Language Arts, Music, Art, Theatre, and School Counseling. Special Education and Elementary Education are included in the education program. In addition to the EPP committee, the Graduate Council and

Academic Review Committees, both a part of the Faculty Senate Committee structure, provide a platform for sharing information about the educator preparation programs with the greater college community.

Mission Statement
The Education Department at Chadron State College prepares professional educators with the knowledge, adaptability, and lifelong learning skills necessary to place students at the center of learning. Our graduates foster academic and social growth, uphold high standards for all students, and contribute meaningfully to education and society.

Vision
To cultivate a generation of educators who are skilled, reflective, open-minded, and committed to empowering every student to reach their full potential and inspire lasting, positive change in schools and communities.

Section 1 Institutional and EPP Contextual Factors

Endorsement Program
The Field Endorsement in Science (7–12) at Chadron State College prepares teacher candidates for secondary-level instruction across the life, physical, and earth sciences. The program provides both breadth and depth of scientific knowledge through a strong Natural Science Core and a selected area of concentration—Biology, Chemistry, Earth and Space Science, or Natural Science. Candidates gain the content mastery, laboratory skills, and pedagogical preparation necessary to teach multiple science disciplines in grades 7–12 while meeting all requirements outlined in Nebraska Rule 24, CAEP, and InTASC standards.

The program emphasizes hands-on laboratory and field experiences, research integration, and inquiry-based instruction. Candidates benefit from close faculty mentorship, modern laboratory facilities, and unique instructional resources such as the Lois Veath Planetarium, Eleanor Barbour Cook Geoscience Museum, and regional field sites across the Pine Ridge and Black Hills. Graduates are qualified to teach general science and their chosen concentration area in Nebraska secondary schools.

1b. Standards for Admission, Retention, Transition and Completion
The initial Educator Preparation Program has three major gateways: (1) Admission into the Teacher Education Program; (2) Acceptance into Student Teaching: and (3) Program Completion. Admission into the program generally takes place during or at the end of the sophomore year. Candidates are not allowed into student teaching until they meet the requirements set by the EPP. There are retention measures in place to ensure candidates are progressing successfully through the education program.

Table 004.06-2 Requirements for Program Admission and Progression

Institutional Criteria	Gateway #1 Admission into the Teacher Education Program	Gateway #2 Admission into Student Teaching	Gateway #3 Program Completion
Grade Point Average (GPA)	2.75 overall GPA – all college coursework, including transfer credits	2.75 overall GPA – all college coursework, including transfer credits	2.75 overall GPA – all college coursework, including transfer credits
Coursework Completion	30 hours of coursework, including Intro to Teaching, Educational Psychology, Intro to Exceptional Learner, and Technology Resources for Learning, with a C or better.	Earn 90 semester hours with 12 hours in residence at Chadron State College, with a C or better in all Education coursework, including EDUC 300 Observation and Participation and Professional Year courses	Passing grade with a C or better for EDUC 490 Student Teaching and EDUC 495 Education Capstone Passing score on Teacher Work Sample
Praxis Exams			Take the Praxis II content exam
Clinical Practice/Field Experiences	Take EDUC 300 Observation and Participation class	100 observation hours are required prior to student teaching.	16-20 weeks student teaching internship Passing scores on Nebraska Clinical Practice Student Teacher Rubric
Recommendations	Five faculty recommendations, including one from the advisor, one from outside of the Department of Education, and three within the candidate's endorsement area.		

Self-Disclosure	Demonstration of social, emotional, personal maturity and physical capabilities	Demonstration of social, emotional, personal maturity and physical capabilities	
Other	Successful background check	Successful background check	Application for graduation; application for certification

The Chadron State College website provides candidates with the required courses for their program of study and the four-year course rotation where students can plan their entire course of study. Advising sheet found in Appendix A.

1c. Field Experiences Required

The program requires 100 practicum clock hours prior to student teaching; one course, EDUC 131 Intro to Teaching at the freshman level and one course, EDUC 300 Observation and Participation at the junior level. Each field experience is used by course instructors to monitor candidates' performance and progress, provides formative information about the candidate, helps the candidate develop the knowledge, skills, and dispositions expected of a teacher, and assists the candidate's understanding of the learner, the classroom environment, application of knowledge, instructional strategies, and professional responsibility. Data is not reported for developmental assessments. Cooperating teacher evaluations are maintained by the EPP to document field experiences.

Student teaching represents the culmination of practical experiences in the teacher education program at Chadron State College. Student teaching is a semester long clinical practice experience for initial teacher certification in which candidates demonstrate knowledge, skills, and professional dispositions by assuming responsibility for whole class instruction in their endorsement and within the grade level for which they are preparing.

Table 005. 03 Field Experience for Initial Certification

*P-Practicum, CP-Clinical Practice, I-Internship

Endorsement Program	Course Name	Credits	Type of Field Experience*	Total Number of Hours
All Education programs	EDUC 131 Intro to Teaching	3 credits	P	25
All Education programs	EDUC 300 Observation & Participation	1-3 credits	P	100
All Education programs	EDUC 490 Student Teaching	9 credits	CP	640
Special Education K-12	SPED 216 Pre-Referral Clinical Experience	1 credit	P	20
Special Education K-12	SPED 317 Microteaching in Early Childhood / Elementary / Middle School / Secondary Special Education	2 credits	P	30
Early Childhood Inclusive B-3	FCS 338 Prenatal and Infant Practicum	3 credits	P	30

Early Childhood Inclusive B-3	FCS 448/448L Early Childhood Practicum	4 credits	P	126

1d. Number and Level of Completers

Program Completers and Level – Content Area:					Science 7-12					
Academic Year					Number of Endorsement Program Completers					
					Bac	Post Bac	Alternate Route	Masters	Ed. Specialist	PhD
20	23	to	20	24	1	1				
20	24	to	20	25	1	0				

Section 2 Endorsement Program Key Assessments and Related Data

Artifact 1. Table of Endorsement Program Key Assessments

Required Assessments

The faculty within the Educator Preparation Program (EPP) created program outcomes, based on the Interstate Teacher Assessment and Support Consortium (InTASC) standards and learning progressions, developed by the Council of Chief State School Officers. The key assessments for the initial program align with these program outcomes.

Table of Endorsement Program Key Assessments

Name of Assessment used for the following areas:		Type or Form of Assessment	Brief Description of Assessment, including indicated information obtained from Assessment	When Assessment is Administered
1	Content-Praxis II or GPA **Praxis II**	**Standardized Assessment**	Praxis II is a standardized assessment given by ETS.	**Praxis II is taken the semester prior to or during student teaching**
2	Content - Knowledge **NE Clinical Practice Evaluation**	**Evaluation**	The Nebraska Clinical Practice Assessment was created by the Nebraska Department of Education. It is filled out by the supervisor and cooperating teacher. InTASC Standards 4 and 5 address content knowledge and application of content	**During Student Teaching**
3	Learner/ Learning	**Evaluation**	The Nebraska Clinical Practice Assessment was created by the	

	Environments **NE Clinical Practice Evaluation**		Nebraska Department of Education. It is filled out by the supervisor and cooperating teacher. InTASC Standards 1, 2, and 3 address learner and learning.	**During Student Teaching**
4	Instructional Practices - Knowledge **NE Clinical Practice Evaluation**	**Evaluation**	The Nebraska Clinical Practice Assessment was created by the Nebraska Department of Education. It is filled out by the supervisor and cooperating teacher. InTASC Standards 6, 7, and 8 address instructional practices.	**During Student Teaching**
5	Instructional Practices - Effectiveness **NE Clinical Practice Evaluation**	**Evaluation**	The Nebraska Clinical Practice Assessment was created by the Nebraska Department of Education. It is filled out by the supervisor and cooperating teacher. InTASC Standard 6 addresses instructional practices.	**During Student Teaching**
6	Professional Responsibility **NE Clinical Practice Evaluation**	**Evaluation**	The Nebraska Clinical Practice Assessment was created by the Nebraska Department of Education. It is filled out by the supervisor and cooperating teacher. InTASC Standards 9 and 10 address professional responsibility.	**During Student Teaching**
7	Overall Proficiency **Follow up Survey**	**Survey**	NDE created survey covers overall proficiency as rated by completer and employer	**After 1st and 3rd years of employment**

8	Optional Assessment **Teacher Work Sample (TWS)**	**Case Study**	The Teacher Work Sample is an additional measure that covers overall proficiency of candidates through the completion of a case study addressing all InTASC Standards.	**During Student Teaching**

Praxis II and GPA
Praxis II is the Education Testing Service (ETS) test for content knowledge. Furthermore, the candidates cannot graduate without a grade point average of 2.75 or better, on a 4.00-point scale.

Nebraska Clinical Practice Evaluation (NCPE)
The NCPE was developed by the Nebraska Department of Education in cooperation with the Nebraska Association of Colleges of Teacher Education (NACTE). The NCPE mirrors the InTASC standards, as well as the CAEP standards.

NDE Follow up Survey
The NDE survey is conducted annually to provide Nebraska institutions with information about the effectiveness of first-year and third-year teachers and covers overall proficiency as rated by completers and employers.

Teacher Work Sample (TWS)
The Teacher Work Sample is a case study activity that illustrates the candidate's ability to apply knowledge and skills relative to content and pedagogy. Candidates analyze data to make decisions and adjust instruction to meet learner needs. See Appendix B.

Artifact 2 Data Tables
Science 7-12 is a mini-folio and will have no data tables attached.

Artifact 3. Narrative interpretation/summary of assessment data.
From the institution's perspective, assessment data for the Field Endorsement in Science (7–12) indicate strong candidate performance across both content knowledge and pedagogical practice. Over the past two academic years, two candidates have successfully completed the program. While the small sample size limits quantitative trend analysis, both recent and historical data provide consistent evidence of candidate proficiency and program effectiveness.

Praxis II / Nebraska Content Test
Recent completers achieved scores above the Nebraska state minimum for their respective content areas, demonstrating mastery of foundational and applied science concepts. Historical Praxis II results further confirm this trend, with all prior completers meeting or exceeding required benchmarks. Candidates have historically performed the strongest in biology, geology, and chemistry fundamentals, reflecting the program's emphasis on broad scientific preparation through the Natural Science Core.

GPA and Academic Performance
Recent completers maintained cumulative GPAs above 3.613, exceeding the 2.75 minimum

requirement. Advising audits indicate that these candidates completed their coursework on schedule, supported by proactive advising and consistent course rotation within the School of Business, Mathematics, and Sciences. Historical GPA data similarly indicate that program completers perform well academically, often earning high marks in both content and professional education courses.

Teacher Work Sample (TWS)
The Teacher Work Samples of recent completers reflect strong integration of inquiry-based instruction, data-driven decision-making, and reflection. Both candidates demonstrated the ability to analyze student learning outcomes and adjust instruction to support diverse learners, meeting or exceeding expectations across all InTASC standards and aligned with the TWS rubric categories. These findings are consistent with historical data showing the program's success in preparing reflective, evidence-based science educators.

Institutional Reflection
Taken together, these data points affirm that the Field Endorsement in Science (7–12) effectively prepares candidates with the knowledge, skills, and dispositions necessary for success in secondary education. While the number of recent completers is small, both quantitative outcomes and qualitative evaluations demonstrate a high level of competency, strong instructional readiness, and alignment with state and national standards. Ongoing monitoring of Praxis subscores, advising trends, and clinical evaluations informs continuous program improvement and supports strategic efforts to increase enrollment and retention.

Content Knowledge:
All completers scored a 3 or a 4 on the components of the Nebraska Clinical Evaluation and Teacher Work Sample for Content Knowledge, indicating proficient to advanced performance. Content GPAs ranged from an average of 3.23 to 3.72, well above the minimum requirement. Praxis II scores averaged 149 across the reporting years, above the 141 cut score requirement. One student scored a 138 during the reported data years, which is below the required cut score requirement.

Learner and Learning:
All completers scored a 3 or a 4 on the aligning components of the Nebraska Clinical Evaluation and Teacher Work Sample for Learner and Learning, indicating proficient to advanced performance.

Instructional Practices:
All completers scored a 3 or a 4 on the components of the Nebraska Clinical Evaluation and Teacher Work Sample for Instructional Practices with the exception of one category, indicating proficient to advanced performance. The area of Instructional Strategies (Engagement) was scored an average of 2.33 in 2023-2024 by cooperating teachers.

Effects of Instructional Practices on Student Learning:
All completers scored a 3 or a 4 on the components of the Teacher Work Sample for Effects of Instructional Practices on Student Learning, indicating proficient to advanced performance.

Professional Responsibilities:

All completers scored a 3 or a 4 on the components of the Nebraska Clinical Evaluation and Teacher Work Sample for Professional Responsibilities, indicating proficient to advanced performance.

Overall Proficiency:
All completers scored a 3 or a 4 on the Nebraska Clinical Evaluation and NDE 1st and 3rd year survey for Overall Proficiency, indicating proficient to advanced performance.

Section 3: Use of Related Data and Information for Continuous Program Improvement of Endorsement Program

Since the last review cycle, the Field Endorsement in Science (7–12) program has implemented targeted changes designed to strengthen candidate preparation, improve content alignment, and ensure consistent performance across all concentration areas. These efforts were guided by analysis of recent completer outcomes, historical assessment data, and feedback from faculty, cooperating teachers, and the Educator Preparation Program (EPP) committee.

Changes Made Based on Data Analysis

Revision of Program Learning Objectives

Praxis II and NCPE data indicated strong performance in general content mastery but variability in physical and applied science reasoning. Faculty therefore revised program learning objectives to:

- Reinforce quantitative and analytical problem-solving skills across laboratory experiences.
- Emphasize cross-disciplinary connections among biology, chemistry, physics, and earth science.
- Incorporate inquiry-based and place-based pedagogy that connects classroom learning with Nebraska's unique environments.

Curriculum and Assessment Alignment

Several upper-level science courses were refined to align with these objectives.

- Embedding instructional technology and data-analysis tools in laboratory courses.
- Strengthening collaboration with regional schools and STEM outreach initiatives to increase enrollment and field experience diversity.

Effect of Program Changes

Although the number of recent completers is small, both graduates demonstrate strong content knowledge and instructional readiness. Improvements to the curriculum and lab experiences have enhanced candidates' ability to apply science concepts to real-world and classroom contexts. Faculty report increased candidate engagement in research and improved integration of technology and data interpretation across concentration areas.

Future Program Improvements

Planned enhancements include:

- Expanding recruitment through collaboration with regional schools and dual-credit

partnerships.
- Increasing alignment of course assessments with new Rule 24 and Next Generation Science Standards (NGSS) competencies.
- Further integrating educational technology into laboratory coursework.

Implications for Unit-Level Improvement

At the unit level, this program demonstrates how cross-disciplinary collaboration and evidence-based reflection support continuous improvement. The Field Endorsement in Science serves as a model for interdisciplinary teacher preparation, illustrating how small programs can maintain quality, meet state standards, and adapt to emerging educational needs. The systematic use of Praxis results, NCPE evaluations, and TWS data continues to drive data-informed decision-making across the Educator Preparation Program at Chadron State College.

Appendix A
Advising Template

B.S. Education (Grades 7-12) **4-YEAR ADVISING TEMPLATE** **Endorsement: Field, Science-Biology**

	FALL		SPRING		SUMMER		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 1	GEOS 231 (SLO-6)	3	GEOS 234	3			
	GEOS 231L	1	GEOS 234L	1			
	CHEM 131	3	CHEM 132	3			
	CHEM 131L	1	CHEM 132L	1			
	BIOL 101	3	BIOL 102	3			
	BIOL 101L	1	BIOL 102L	1			
	FYI (SLO-1)	6	MATH 138 (SLO-4)	3			
			EDUC 131	3			
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 2	PHYS 151	3	PHYS 152	3			
	PHYS 151 L	1	PHYS 152 L	1			
	EDUC 224	3	PSYCH 231	3			
	BIOL 220	3	CHEM or GEOS 310	1			
	BIOL 220L	1	BIOL 241	3			
	BIOL/CHEM/GEOS/PHYS 320	1	BIOL 241L	1			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 3	CHEM or GEOS 401	1	CHEM or GEOS 410	1			
	SPED 230	3	BIOL 332	3			
	EDUC 329	2	BIOL 332L	1			
	BIOL 336	2	EDUC 300	3			
	BIOL 336L	1	SPED 334	3			
	BIOL/CHEM/GEOS/PHYS 320	1	GEOS 437 (SLO-9)	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3					
	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS		
	FALL		**SPRING**		BIOL/CHEM/GEOS/PHYS 320 may be repeated for up to total of 2 credit hours in different disciplines in different semesters. Example: 1 credit hour in CHEM and 1 credit hour in BIOL.		
YEAR 4	COURSES	Cr. Hr.	COURSES	Cr. Hr.			
	EDUC 411S	1	EDUC 490	9			
	EDUC 412S	1	EDUC 495	3			
	EDUC 414S	1					
	EDUC 415S	1					
	EDUC 418S	1					
	SPED 412S	1					
	EDUC 431G	3					
	CAP (SLO-12)	3					
	TOTAL CREDIT HOURS	12	TOTAL CREDIT HOURS	12			

Biology Concentration

B.S. Education (Grades 7-12) **4-YEAR ADVISING TEMPLATE** **Endorsement: Field, Science-Chemistry**

	FALL		SPRING		SUMMER		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 1	GEOS 231 (SLO-6)	3	GEOS 234	3			
	GEOS 231L	1	GEOS 234L	1			
	CHEM 131	3	CHEM 132	3			
	CHEM 131L	1	CHEM 132L	1			
	BIOL 101	3	BIOL 102	3			
	BIOL 101L	1	BIOL 102L	1			
	FYI (SLO-1)	6	MATH 138 (SLO-4)	3			
			EDUC 131	3			
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 2	PHYS 151	3	PHYS 152	3			
	PHYS 151 L	1	PHYS 152 L	1			
	EDUC 224	3	PSYCH 231	3			
	CHEM 231	2	CHEM or GEOS 310	1			
	CHEM 231L	1	CHEM 335	3			
	BIOL/CHEM/GEOS/PHYS 320	1	CHEM 335l	1			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 3	CHEM or GEOS 401	1	CHEM or GEOS 410	1			
	SPED 230	3	CHEM 433	3			
	EDUC 329	2	CHEM 433L	1			
	CHEM 341	3	EDUC 300	3			
	CHEM 341L	1	SPED 334	3			
	BIOL/CHEM/GEOS/PHYS 320	1	GEOS 437 (SLO-9)	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3					
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS		
	FALL		**SPRING**				
	COURSES	Cr. Hr.	COURSES	Cr. Hr.			
YEAR 4	EDUC 411S	1	EDUC 490	9			
	EDUC 412S	1	EDUC 495	3			
	EDUC 414S	1					
	EDUC 415S	1					
	EDUC 418S	1					
	SPED 412S	1					
	EDUC 431G	3					
	CAP (SLO-12)	3					
	TOTAL CREDIT HOURS	12	TOTAL CREDIT HOURS	12			

BIOL/CHEM/GEOS/PHYS 320 may be repeated for up to total of 2 credit hours in different disciplines in different semesters. Example: 1 credit hour in CHEM and 1 credit hour in BIOL.

Chemistry Concentration

B.S. Education (Grades 7-12) **4-YEAR ADVISING TEMPLATE** **Endorsement: Field, Science-Earth & Space**

	FALL		SPRING		SUMMER		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 1	GEOS 231 (SLO-6)	3	GEOS 234	3			
	GEOS 231L	1	GEOS 234L	1			
	CHEM 131	3	CHEM 132	3			
	CHEM 131L	1	CHEM 132L	1			
	BIOL 101	3	BIOL 102	3			
	BIOL 102L	1	BIOL 102L	1			
	FYI (SLO-1)	6	MATH 138 (SLO-4)	3			
			EDUC 131	3			
	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS	18	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 2	PHYS 151	3	PHYS 152	3			
	PHYS 151 L	1	PHYS 152 L	1			
	EDUC 224	3	PSYCH 231	3			
	GEOS 233	2	CHEM or GEOS 310	1			
	GEOS 233L	1	GEOS 334	3			
	GEOS 434	3	ESSENTIAL STUDIES	3			
	BIOL/CHEM/GEOS/PHYS 320	1	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3					
	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS		
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 3	CHEM or GEOS 401	1	CHEM or GEOS 410	1			
	SPED 230	3	GEOS 431	3			
	EDUC 329	2	SPED 334	3			
	GEOS 439	3	EDUC 300	3			
	GEOS 439L	1	GEOS 437 (SLO-9)	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	BIOL/CHEM/GEOS/PHYS 320	1					
	TOTAL CREDIT HOURS	17	TOTAL CREDIT HOURS	19	TOTAL CREDIT HOURS		
	FALL		**SPRING**				
	COURSES	Cr. Hr.	COURSES	Cr. Hr.			
YEAR 4	EDUC 411S	1	EDUC 490	9			
	EDUC 412S	1	EDUC 495	3			
	EDUC 414S	1					
	EDUC 415S	1					
	EDUC 418S	1					
	SPED 412S	1					
	EDUC 431G	3					
	CAP (SLO-12)	3					
	TOTAL CREDIT HOURS	12	TOTAL CREDIT HOURS	12			

BIOL/CHEM/GEOS/PHYS 320 may be repeated for up to total of 2 credit hours in different disciplines in different semesters. Example: 1 credit hour in CHEM and 1 credit hour in BIOL.

Earth and Space Science Concentration

B.S. Education (Grades 7-12) **4-YEAR ADVISING TEMPLATE** **Endorsement: Field, Science-Natural Science**

	FALL		SPRING		SUMMER		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 1	GEOS 231 (SLO-6)	3	GEOS 234	3	CHEM 313	3	
	GEOS 231L	1	GEOS 234L	1	CHEM 313L	1	
	CHEM 131	3	CHEM 132	3			
	CHEM 131L	1	CHEM 132L	1			
	FYI (SLO-1)	6	MATH 138 (SLO-4)	3			
			EDUC 131	3			
	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	14	TOTAL CREDIT HOURS	4	
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 2	PHYS 151	3	PHYS 152	3	BIOL 312	3	
	PHYS 151 L	1	PHYS 152 L	1	BIOL 312L	1	
	PSYCH 231	3	EDU 224	3			
	BIOL/CHEM/GEOS/PHYS 320	1	CHEM or GEOS 310	1			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	BIOL 101	3	BIOL 102	3			
	BIOL 101L	1	BIOL 102L	1			
	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	15	TOTAL CREDIT HOURS	4	
	FALL		**SPRING**		**SUMMER**		
	COURSES	Cr. Hr.	COURSES	Cr. Hr.	COURSES	Cr. Hr.	TERM
YEAR 3	CHEM or GEOS 401	1	CHEM or GEOS 410	1	GEOS 312	3	
	SPED 230	3	EDUC 300	3	GEOS 312L	1	
	EDUC 329	2	SPED 334	3			
	ESSENTIAL STUDIES	3	GEOS 437 (SLO-9)	3			
	BIOL/CHEM/GEOS/PHYS 320	1	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3	ESSENTIAL STUDIES	3			
	ESSENTIAL STUDIES	3					
	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	16	TOTAL CREDIT HOURS	4	
	FALL		**SPRING**				
	COURSES	Cr. Hr.	COURSES	Cr. Hr.			
YEAR 4	EDUC 411S	1	EDUC 490	9			
	EDUC 412S	1	EDUC 495	3			
	EDUC 414S	1					
	EDUC 415S	1					
	EDUC 418S	1					
	SPED 412S	1					
	EDUC 431G	3					
	CAP (SLO-12)	3					
	TOTAL CREDIT HOURS	12	TOTAL CREDIT HOURS	912			

BIOL/CHEM/GEOS/PHYS 320 may be repeated for up to total of 2 credit hours in different disciplines in different semesters. Example: 1 credit hour in CHEM and 1 credit hour in BIOL.

Appendix B
TWS Rubric

Chadron State College
Teacher Work Sample Scoring Definitions

4. Advanced: {A 140-131} – The teacher candidate obtaining this designation has demonstrated consistent, professional, and performance skills beyond the basic essentials in the chosen academic area and has demonstrated the ability to apply the performance skills with several aspects integrated so that the whole of the TWS has a coherent structure and meaning. The teacher candidate can plan, assess, instruct, analyze data, and reflect upon the appropriate P-12 students' performances at a level that enables P-12 students' growth in a solid, conceptual understanding of the chosen academic area. *This denotes the presence of the advanced skills necessary to teach and assess students in the academic area.*

3. Proficient: {B 130-118} – The teacher candidate obtaining this designation has demonstrated the basic essential set of professional and performance skills needed to teach and assess students in the chosen academic area. The basic concepts of the subject matter, teaching in the academic area, and assessing student performance are understood as one problem, idea, or concept following another, but are not interrelated as a whole system of understanding. The teacher candidate can plan, assess, instruct, analyze data, and reflect upon the appropriate P-12 students' performances to help P-12 students' growth of procedural and conceptual understanding in the chosen academic area at an expanding level. *This denotes the presence of essential skills necessary to teach and assess students in the academic area.*

2. Progressing: {C 117-105} – The teacher candidate obtaining this designation has demonstrated the presence of beginning professional and academic performance skills needed to teach and assess students. Aspects of a problem, idea, or concept are seen in rote application with nominal relationship of facts and ideas to each other. The teacher candidate can assess student learning and can develop learning experiences somewhat based on students' developmental levels and prior experience. The candidate shows minimal analysis or reflection upon appropriate P-12 students' performances such that P-12 students' understanding in the academic area will be more rote learning with less conceptual understanding. *This denotes the presence of the bare essential skills necessary to teach and assess students in the academic area.*

1. Unacceptable: {D Below 105} – The teacher candidate obtaining this designation does not perform at a level that exhibits preparedness for teaching, but does demonstrate some basic understanding of professional and academic performance skills needed to teach and assess students. The teacher candidate cannot accurately assess student learning or develop learning experiences based on students' developmental levels or prior experience. The candidate shows little, if any, analysis or reflection upon appropriate P-12 students' performances such that P-12 students' understanding in the academic area may be negatively impacted. *Any rating earned at or below the Unacceptable level in the teacher candidate's TWS will be deemed unacceptable for a teacher candidate preparing for Nebraska teacher certification.*

0. Missing: {F} – The teacher candidate obtaining this designation does not perform at a level that exhibits preparedness for teaching, nor does the candidate demonstrate any basic understanding of professional and academic performance skills needed to teach and assess students. The teacher candidate cannot accurately assess student learning or develop learning experiences based on students' developmental levels or prior experience. The candidate shows no ability to analyze or reflect upon appropriate P-12 students' performances such that P-12 students' understanding in the academic area may be negatively impacted. *Any rating earned at or below the Unacceptable level in the teacher candidate's TWS will be deemed unacceptable for a teacher candidate preparing for Nebraska teacher certification.*

Possible Score	4 – Advanced	3 – Proficient	2 – Progressing	1- Unacceptable	0 – Missing	Score
Professional Presentation						
(4) Title Page	Title page is complete	Title page is missing one component	Title page is missing two components	Title page is missing three or more components	Title page is missing	
(5) Table of Contents	Table of Contents is complete and organized	Table of Contents is missing one component	Table of Contents is missing two components	Table of Contents is missing more three or more components	Table of Contents is missing	
(6) Writing Conventions	Writing is grammatically correct, complete, easy to understand and represents professional writing	Writing is grammatically correct, complete, easy to understand, but contains a few errors	Writing contains several errors, or may not be complete or easy to understand	Writing contains significant errors, is not complete or easy to understand	Writing contains numerous errors, and unable to comprehend	
(7) Organization	Organization of presentation aligns with TWS Instruction Sheet	Organization of presentation has a few deviations from the TWS Instruction Sheet	Organization of presentation has several deviations from the TWS Instruction Sheet	Organization of presentation does not align with the TWS Instruction Sheet	Organization of presentation is absent.	
(8) Comments on Professional Presentation	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Contextual Factors and Instructional Setting						
(9) Community, District, and School	Descriptions of contextual factors are clear and complete	Descriptions of contextual factors are unclear and missing one component	Descriptions of contextual factors are unclear and missing two-three components	Descriptions of contextual factors are very unclear and missing more than three components	Descriptions of contextual factors is missing	

(10) Classroom Factors	Descriptions of classroom factors are clear and complete	Descriptions of classroom factors are unclear and missing one component	Descriptions of classroom factors are unclear and missing two-three components	Descriptions of classroom factors are very unclear and missing more than three components	Descriptions of classroom factors are missing	
(11) Rationale	Rationale for the concept or subject is very clear and complete	Rationale for the concept or subject is mostly clear and complete	Rationale for the concept or subject is unclear and/or incomplete	Rationale for the concept or subject is unclear and incomplete	Rationale for the concept or subject is missing	
(12) Class Characteristics	Description of class characteristics is clear and complete	Description of class characteristics is unclear and missing one component	Description of class characteristics is very unclear and missing two-three components	Description of class characteristics of the class is unacceptable and missing three or more components	Characteristics of the class are missing	
(13) Instructional Implications	Explanation of the instructional implications is very clear and complete	Explanation of the instructional implications is mostly clear and complete	Explanation of the instructional implications is unclear and/or incomplete	Explanation of the instructional implications is unclear and incomplete	Explanation of the instructional implications is missing	
(14) Comments on Contextual Factors and Instructional Setting	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Initial Instructional Plan						
(15) Objectives	Objectives exceed expectation of pre-service teachers	Objectives state what the students will learn	Objectives partially state what students will learn	Objectives do not specify what the students will learn	Objectives are missing	
(16) Standards	Each objective is explicitly tied to standards	Some objectives are explicitly tied to standards	Few objectives are inadequately tied to standards	Objectives are not tied to standards	Standards are missing	

(17) Instructional Plans	Instructional plans are complete and contain four or more examples of differentiated instructional methods or levels of learning (at least three consecutive lessons)	Instructional plans are complete and contain three examples of differentiated instructional methods or levels of learning (at least three consecutive lessons)	Instructional plans are complete and contain two examples of differentiated instructional methods or levels of learning (at least three consecutive lessons)	Instructional plans contain one example of differentiated instruction or levels of learning (at least three consecutive lessons)	Instructional plans are missing	
(18) Formative Assessments	Multiple and varied formative assessments are included and align with the objectives/instructional plan	Multiple or varied formative assessments are included and align with objectives/instructional plan	A formative assessment is included and somewhat aligns with objectives/instructional plan	Formative assessments are included but do not align with objectives/instructional plan	No formative assessments are included in the instructional plan	
(19) Comments on Initial Instructional Plan	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Assessment Plan (Section 1)						
(20) Objective Alignment	Pre-assessment and post-assessment are aligned with all objectives	Pre-assessment and post-assessment are aligned with most objectives	Pre-assessment and post-assessment are aligned with few objectives	Pre-assessment and post-assessment are not aligned with the objectives	Pre-assessment and post-assessment are missing	
(21) Assessment Characteristics	Pre-assessment and post-assessment have all of the following: 1. have face validity 2. appear to be reliable 3. are appropriate to level	Pre-assessment and post-assessment have four of the following: 1. have face validity 2. appear to be reliable 3. are appropriate to level 4. are based on instructional plans	Pre-assessment and post-assessment have three of the following: 1. have face validity 2. appear to be reliable 3. are appropriate to level	Pre-assessment and post-assessment have two or fewer of the following: 1. have face validity 2. appear to be reliable 3. are appropriate to level	Pre-assessment and post-assessment are missing	

	4. are based on instructional plans 5. student directions and scoring procedures are clearly explained	5. student directions and scoring procedures are clearly explained	4. are based on instructional plans 5. student directions and scoring procedures are clearly explained	4. are based on instructional plans 5. student directions and scoring procedures are clearly explained		
(22) Instruments and Student Samples	Examples of a high-score <u>and</u> a low-score confidential student **pre-assessment <u>and</u> post-assessment** are included (4 in all)	Examples of a high-score <u>and/or</u> a low-score confidential student **pre-assessment <u>and/or</u> post-assessment are** included (Only 3 included)	Examples of a high-score <u>and/or</u> a low-score confidential student **pre-assessment <u>and/or</u> post-assessment** are included **(**Only 2 included)	Only one example of a high- or low-score confidential student **pre-assessment or post-assessment** is included (Only 1 included)	No examples of confidential student assessment included.	
(23) Clarity of Criterion and Standards for performance	The assessment contains clear criteria for measuring student performance and are linked to the learning goals.	Assessment criteria have been developed, but they are not clear but are linked to learning goals.	Assessment criteria have been developed, but are not clear and are not linked to learning goals.	Assessment criteria have not been developed and are not clear and are not linked to learning goals.	Assessment criteria missing.	
(24) Comments on Assessment Plan (Section 1)	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Assessment Plan (Section 2)						
(25) Data Display	Pre-assessment data is clearly and completely displayed in a labeled graph or chart	Pre-assessment data is clearly and completely displayed but not in a graph or chart	Pre-assessment data is displayed in a graph or chart but is unclear	Pre-assessment data is not displayed in a graph or chart and is unclear	Pre-assessment data is missing	
(26) Data Analysis	Pre-assessment data is clearly and completely	Pre-assessment data is clearly and completely described but	Pre-assessment data is inadequately	Pre-assessment data is not described or analyzed	Pre-assessment data is missing	

	described and analyzed	inadequately analyzed	described and analyzed			
(27) Revision Description	Need for revisions of initial instructional plans is clearly and completely described	Need for revisions of initial instructional plans is unclear or incomplete	Need for revisions of initial instructional plans is unclear and incomplete	Need for revisions of initial instructional plans is not acknowledged	Need for revisions o initial instructional is missing	
(28) Comments on Assessment Plan (Section 2)	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Revised Instruction Plans						
(29) Revisions Included	Revisions reflect student needs based on pre-assessment data	Revisions reflect some of the student needs based on pre-assessment data	Revisions reflect few of the student needs based on pre-assessment data	Revisions do not reflect student needs based on per-assessment data	No revisions were made to the instructional plan	
(30) Objectives	Objectives exceed expectation of pre-service teachers	Objectives state what the students will learn	Objectives partially state what students will learn	Objectives do not specify what the students will learn	Objectives are missing	
(31) Standards	Each objective is explicitly tied to standards	Some objectives are explicitly tied to standards	Few objectives are tied to standards	Objectives are not tied to standards	Standards are missing	
(32) Instructional Plans	Instructional plans are complete and contain four or more examples of differentiated instructional methods or levels of learning (at least three	Instructional plans are complete and contain three examples of differentiated instructional methods or levels of learning (at least three consecutive lessons)	Instructional plans are complete and contain two examples of differentiated instructional methods or levels of learning (at least three consecutive lessons)	Instructional plans contain one example of differentiated instruction or levels of learning (at least three consecutive lessons)	Revised instructional plans that are missing	

	consecutive lessons)					
(33) Formative Assessments	Multiple and varied formative assessments are included and align with the objectives/instructional plan	Multiple or varied formative assessments are included in the instructional plan and align with objectives/instructional plan	A formative assessment is included and somewhat aligns with objectives/instructional plan	No formative assessments are included in the instructional plan	No formative assessments are included in the instructional plan	
(34) Comments on Revised Instruction Plans	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Assessment Plan (Section 3)						
(35) Post Assessment Data	Post-assessment data is clearly and completely described and analyzed	Post-assessment data is clearly and completely described but inadequately analyzed	Post-assessment data is inadequately described and analyzed	Post-assessment data is not described or analyzed	Post-assessment data is missing	
(36) Data Comparison: Individual Growth	Comparison of pre-assessment and post-assessment data showing **individual growth** is clearly and completely displayed in a labeled graph or chart	Comparison of pre-assessment and post-assessment data showing **individual growth** is displayed but not in a graph or chart	Comparison of pre-assessment and post-assessment data showing **individual growth** is displayed in a graph or chart but is unclear	Comparison of pre-assessment and post-assessment data showing **individual growth** is not displayed in a graph or chart and is unclear	Comparison of pre-assessment and post-assessment data showing **individual growth** is missing	
(37) Data Comparison: Class Growth	Comparison of pre-assessment and post-assessment data showing **class growth** is clearly and	Comparison of pre-assessment and post-assessment data showing **class growth** is	Comparison of pre-assessment and post-assessment data showing **class growth** is displayed in a	Comparison of pre-assessment and post-assessment data showing **class growth** is not displayed in a	Comparison of pre-assessment and post-assessment data showing **class growth** is missing	

	completely displayed in a labeled graph or chart	displayed but not in a graph or chart	graph or chart but is unclear	graph or chart and is unclear		
(38) Impact on Student Learning	Description of impact upon student learning is clearly and completely stated	Description of impact upon student learning is stated and is mostly clear or complete	Description of impact upon student learning is stated but is unclear and/or incomplete	Description of impact upon student learning is stated and is unclear and incomplete	Description of impact upon student learning is missing	
(39) Impact of Instruction	Impact of instruction on student growth is clearly and completely analyzed	Analysis of impact of instruction on student growth is unclear or incomplete	Analysis of impact of instruction on student growth is unclear and incomplete	Impact of instruction on student growth is inadequately stated	Impact of instruction on student growth is missing	
(40) Comments on Assessment Plan (Section 3)	*(Comments optional; you will be prompted to enter any provided comments into the Microsoft Form.)*					
Instruction Decision Making, Reflection, and Self Evaluation						
(41) Decision Making	Contains four examples of instructional decision making based on pre-assessment data and on student's learning during lessons.	Contains three examples of instructional decision making based on pre-assessment data and on student's learning during lessons.	Contains two examples of instructional decision making based on pre-assessment data and on student's learning during lessons.	Contains fewer than two examples of instructional decision making based on pre-assessment data and on student's learning during lessons.	Examples of instructional decision making based on pre-assessment data and student's learning are missing.	
(42) Strategies // Activities	Description of two effective instructional strategies/activities is clear	Description of two effective instructional strategies/activities is unclear	Description of one effective instructional strategies/activities is clear	Description of one effective instructional strategies/activities is unclear	No description of effective instructional strategies/activities is included	

(43) Formative Assessments	Describes multiple varied formative assessments used to monitor student progress	Describes multiple formative assessments used to monitor student progress	Describes a varied formative assessment used to monitor student progress	Describes a formative assessment used to monitor student progress	Formative assessments are not described	
(44) Barriers	Description of two barriers to student learning is clear	Description of two barriers to student learning is unclear	Description of one barrier to student learning is clear	Description of one barrier to student learning is unclear	Description of barriers is not included.	
(45) Reflection	The reflection and self-evaluation contains analysis of all the following: 1. Engaged time 2. Student interest and motivation 3. Student mastery of learning objectives 4. Revisions of instructional strategies/ activities 5. Student feedback 6. Future considerations based on self-evaluation 7. Future considerations based on cooperating teacher and/or students	The reflection and self-evaluation contains analysis of five or six of the following: 1. Engaged time 2. Student interest and motivation 3. Student mastery of objectives 4. Revisions of instructional strategies/activities 5. Student feedback 6. Future considerations based on self-evaluation 7. Future considerations based on cooperating teacher and/or students	The reflection and self-evaluation contains analysis of three or four of the following: 1. Engaged time 2. Student interest and motivation 3. Student mastery of objectives4. Revisions of instructional strategies/activities 5. Student feedback 6. Future considerations based on self-evaluation 7. Future considerations based on cooperating teacher and/or students	The reflection and self-evaluation contains analysis of two or fewer of the following: 1. Engaged time 2. Student interest and motivation 3. Student mastery of objectives 4. Revisions of instructional strategies/ activities 5. Student feedback 6. Future considerations based on self-evaluation 7. Future considerations based on cooperating teacher and/or students	The reflection and self-evaluation are missing	

(2) Semester Date_____

(3) Rater_____

Teacher Work Sample Rubric

Follow your TWS Instruction Sheet to ensure your project contains all of the components needed.