



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers

EDUCATION
STANDARDS
and PRACTICES BOARD

COVER SHEET

1. Institution's Name: Turtle Mountain Community College
2. Date Submitted: April 28, 2017
3. Preparer of this Report: Dr. Teresa Delorme
 - a. Phone: (701) 477-7826
 - b. E-mail tdelorme@tm.edu
4. CAEP/State Coordinator: Dr. Rebecca Pitkin
 - a. Phone:
 - b. E-mail:
5. Name of Institution's program: Teacher Education
6. Grade levels for which candidates are being prepared: Degree or award level
(select one)
 - a. Initial
 - i. Baccalaureate
 - ii. Post Baccalaureate
7. Is this program offered at more than one site?
 - a. Yes
 - b. No
8. If your answer is yes to the above question, list the sites at which the program is offered:
9. Program report status (check one):
 - a. Initial Review
 - b. Continuing Review
 - c. Focused Visit



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers

SECTION I-CONTEXTUAL INFORMATION

1. Candidate Information

<p>Directions: Provide three years of data on candidates enrolled* in the program and completing** the program, beginning with the most recent academic year for which numbers have been tabulated. Please report the data separately for the levels/tracks (e.g., baccalaureate, postbaccalaureate, alternate routes, master’s, doctorate) being addressed in this report.</p>		
<p>Program:</p>		
Academic Year	# of Candidates Enrolled in the Program	# of Program Completers
2015-2016	1	0
2014-2015	2	0
2013-2014	4	4

* Enrolled candidates are those formally admitted to the program as of the institution's official fall reporting date or as of October 15 of each academic year.

** Program completers are those candidates for whom a degree is conferred within the selected academic year. The academic year begins in the fall and concludes in the spring or summer of the following year depending upon whether candidates are granted degrees in the summer.

2. Curriculum Exhibit (Select 1)

- a. ___ **Option 1:** Complete the Curriculum Exhibit Form below. **Include an electronic link to each syllabus for courses listed under the Teaching Specialty and the Professional Education columns.**
- b. ___ **Option 2:** Upload the Program Status Sheet (must include general studies, specialty area, and professional education courses). **Include an electronic link to each syllabus for courses listed under the Teaching Specialty and the Professional Education columns.**

III. Curriculum Exhibit Form SFN 14381. Provides the opportunity for institutions to document the entire program including general studies, teaching specialty, and professional education.

- 1. Curriculum exhibit forms are to be prepared for every basic and advanced program being brought forward for either initial or continuing approval by the Education Standards and Practices Board (ESPB).
- 2. A separate sheet is to be completed for **each** program for which approval is requested. If more than one program is offered within an approval category, a separate sheet must be



EDUCATION
STANDARDS
and PRACTICES BOARD

North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers

completed for each of those programs. For example, if both instrumental and vocal/choral music majors are offered, complete a separate sheet for each.

Also, for example, a separate sheet must be completed for each of the science and social science majors.



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers



3.
CURRICULUM EXHIBIT FORM BASIC PROGRAM
EDUCATION STANDARDS AND PRACTICES BOARD



SFN 14381 (05-06)

Institution: Turtle Mountain Community College		Major: Secondary Science
Credits are: Semester		
Credits required for degree: Credits required:134		
General Studies	Teaching Specialty	Professional Education
Credits Required:	Credits required:	Credits Required:



EDUCATION
STANDARDS
and PRACTICES BOARD

North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers

<p>COMM 110 Fund Pub Spkg (3 cr.) ENGL 110 College Comp I (3 cr.) ENGL 120 College Comp II (3 cr.) HIST 103 US Hist to 1877 (3 cr.) or HIST 104 US Hist since 1877 (3 cr.) or HIST 220 ND Hist (3 cr.) HIST 251 Chippewa Hist I (3 cr.) or HIST 252 Chippewa Hist II (3 cr.) LANG 121 Chipp/Cree Lang I (3 cr.) or LANG 122 Chipp/Cree Lang II (3 cr.) or LANG 125 Ojibwa Lang. I (3 cr.) or LANG 126 Ojibwa Lang. II (3 cr.) PSYC 111 Intro to Psyc (3 cr.) ASTR 110 Principles of Astronomy (3cr) MATH 111 College Alg I (3 cr.) MATH 112 College Alg II (3 cr.) or MATH 103 College Alg (4 cr.) MATH 240 Applied Stats (2 cr) or MATH 212 Statistics (3 cr) MATH 107 R Pre-Calc (3 cr.) or MATH 105 Trigonometry (4 cr)</p>	<p>BIOL 150 Gen Biol I/Lab (4 cr.) BIOL 151 Gen Biol II/Lab (4 cr.) BIOL 170 General Zoology(4cr.) BIOL 220 Anat & Phys I/L (4 cr.) BIOL 363 Entomology/Lab (4cr.) CHEM 121 Chem I/Lab (4 cr.) CHEM 122 Chem II/Lab (4 cr.) CHEM 380 Environ. Chem (4cr.) CHEM 301 Biochemistry(4cr.) GEOL 101 Environ Geol/Lab (4 cr.) or PHYS 211 College Phys I/Lab (4 cr.) PHYS 212 College Phys II/Lab (4cr.) PHYS 320 Phys Sci. for Teachers (4 cr.)</p>	<p>EDUC 235 Praxis I Review (1 cr.) EDUC 236 Praxis II Review (1 cr.) EDUC 300 Ed Tchnlgy (3 cr.) EDUC 310 Intro. To Excep. Child (3 cr.) EDUC 320 Issues in Native Education (3 cr.) EDUC 321 Hum Rel & Mltictl Ed (3 cr.) EDUC 329 Curr Planning & Eval (3 cr.) EDUC 330 Found of Ed (3 cr.) EDUC 350 Practicum 1 (1 cr.) EDUC 353 Chld & Adol Psych (3 cr.) EDUC 360 Practicum 2 (1 cr.) EDUC 375 Tchg Rdg/Cont Area (2 cr.) EDUC 414 Stud Teaching (12 cr.) EDUC 415 Teaching Seminar (1cr.) EDUC 470 Meth Secondary Sci (2 cr.)</p>
--	---	--



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of Composite
Science Teachers

MATH 165 Calculus (4 cr) GEOL 106 Earth Through Time (4cr)		
Total: 42	Total: 57	Total: 42

ESPB does not advocate, permit, nor practice discrimination on the basis of sex, race, color, national origin, religion, age or disability as required by various state and federal laws.

3. **Descriptive Information about the Program:** Provide a one to two paragraph description to help reviewers understand your program (include information the describes how a student typically moves through the program from entry to exit):

Secondary Science students typically begin their program of study by enrolling in basic education coursework with all education majors during their first semester in the program. They begin by taking Education Technology during the first summer of their program. Then, they attend Introduction to the Exceptional Learner, Multicultural Education, Curriculum Planning, Child and Adolescent Psychology, and Foundations of Education courses along with all other first year students. Beginning second semester of their first year, they branch out into their specialty area by taking CHEM 380 and 13 credits in their content area. Fall of their second year, they continue to select courses from those listed in the teacher education manual in Chemistry, Geology,



EDUCATION
STANDARDS
and PRACTICES BOARD

North Dakota Education Standards and Practices Board Initial Program Report for the Preparation of Composite Science Teachers

Biology, and Physics in order to meet the 28 credit requirement beyond the general education science coursework requirement. If they are on schedule with their program of study, they will complete their student teaching and attend Student Teaching Seminar spring semester of their senior year.

- 4. Changes in the Program Since the Last Review** (please describe any changes since the last review and include rationale for those changes): Response: Between Spring 2014 and Spring 2016, no new science students were admitted to the program due to the fact that we had no applicants. During Spring Semester 2016, three science candidates were admitted to the program. One left near the end of that Summer Semester 2016. The institution lost the instructor who taught chemistry classes. Prior to the admission of the new candidates, we had only one science student who was well on her way to completion, and it was not nearly the concern that it became with the admission of a new cohort. As recommended, the unit has been collaborating with the science and math departments and consulting with administration to identify needs regarding faculty to cover science content. The admission of new candidates compelled the institution to double efforts to recruit. As a result, two instructors were recruited during the 2016-17 academic year to cover secondary science students' needs. If they are unable to teach a required, course, for whatever reason, the unit will pay for students to take the course from other institutions.
- 5. Field & Clinical Experiences:** Briefly describe the required field & clinical experiences that are specific to your program including the number of hours for early field experiences and the number of hours/weeks for student teaching or internships:

Early field experiences include Practicum 1 (40 hours) during the Fall Semester of the first year. Practicum 2 (40 hours) occurs during the Fall Semester of the second year. Typically, students are placed in area schools in Rolette County for both. **Student teaching placements:** Candidates complete 12 weeks (60 days) of student teaching in area schools, unless there is a specific request to complete this requirement outside of the area.

As a result of feedback from candidates and area administrators regarding level of preparedness in the area of classroom management, the unit made the decision during the 2015-16 academic year to increase Practicum II hours to 80 for future years. In addition, both practicums have been moved to the start of the school year to offer candidates the opportunity to observe and assist in setting classroom rules and procedures critical to overall classroom management.

SECTION II: RESPONSE TO STANDARDS

- 1. Areas of Weakness from Prior Review:** How has the program addressed and resolved the weaknesses targeted in the previous program review and not previously resolved? Describe



EDUCATION
STANDARDS
and PRACTICES BOARD

North Dakota Education Standards and Practices Board Initial Program Report for the Preparation of Composite Science Teachers

actions taken to address the weakness and provide evidence that the weakness has been resolved.

13047.6 Curriculum: Weakness: Very little collaboration is going on between the teacher education program and the general education programs, specifically mathematics and science. **Response:** During the 15-16 academic year, we had one active secondary science student who had completed most of her coursework. Science faculty were invited to review the secondary science program of study and work with the unit to assess the institutions ability to meet the needs of the program with current staff. Together, we mapped out a strategy to ensure that instructors would be available to offer required coursework mapped out in the Secondary Science Program of Study. This was a difficult process due to the fact that our science department is very small and some of the faculty are not qualified to teach required coursework. The institution had science positions advertised but received very few applicants, most of whom were not qualified in the areas needed.

Assessment Evidence (3 required): Data on student teacher performance evaluation was not provided.

Response: N/A There were no science student teachers during the 2015-16 academic year. One candidate completed student teaching Spring 2015 but did not complete the program of study and did not pass Praxis II. We do have one candidate completing her student teaching this year, and we are using the Student Teaching Observation Tool, which is standards-based for the evaluation.

- 2. Course/Assessment Matrix:** Complete the matrix below. List courses that address each of the ESPB standards for your program. All courses listed should be linked to an electronic syllabus. Next list the assessments that most clearly align with each standard. Choose from among those listed in Section 4: Evidence of Meeting the Standard



**North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers**

State Standard	Course Prefix and Title (with electronic links to syllabi)	Assessment (from among those listed under item 4: Evidence of Meeting the Standard)
-----------------------	---	--



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers

<p>13047.1 Composite Science Major/General Science The composite/general science program must include environmental science incorporated within other courses or as a separate course. The composite/general science program requires: 1. Coursework in biology, chemistry, physics, and earth science, including: a. Minimum of twenty-four semester hours in one area. b. Minimum of twelve semester hours in two other areas. c. Minimum of four semester hours in the fourth area. d. Courses must be from those that the institution allows toward graduation in the science major. 2. Study of mathematics through the pre-calculus level (college algebra and above) and statistics</p>	<p>EDUC 470 Methods of Secondary Science Chemistry: (8 Credits) Chemistry CHEM 380 Environmental CHEM 301 Biochemistry MATH 165 Calculus MATH 240 Applied Statistics Geology (4 Credits) GEOL105 Physical Geology GEOL 320 Oceanography GEOL 450 Sedimentology & Stratigraphy GEOL 101 Environmental Geology Biology: (8 Credits) BIOL170 General Zoology BIOL 363 Entomology BIOL 220 Anatomy/Physiology I BIOL Electives Physics: (4 Credits) PHYS 212 College Physics II PHYS 275 Planetary Science PHYS 320 Physical Science for Teachers MATH 165 Calculus EDUC 350 Practicum I EDUC 360 Practicum II</p>	<p>EDUC 470: Mid-term; Final; Lesson Plans; Field Lessons Praxis reports - Content Test and PLT (Detailed Score Information and Number (Percent) TMCC's Examinees Scoring in Each Quartile in Each Category.</p> <p>highlight or isolate specific categories within the Student Teaching Evaluation data</p> <p>PHYS 320: Lab Notebook; Daily work; Mid Term; Final Exam</p> <p>MATH 165: Homework participation, quizzes, chapter exams, final exam</p> <p>MATH 240 Applied Statistics: 50% of grade is based on completion of problem sets. The remaining 50% is based on 6 exams, each covering 2 chapters of text.</p>
---	---	---



**North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers**

<p>13047.2 Nature of Science The program requires study of the history and philosophy of science as well as the interrelationships among the sciences.</p>		<p>PHYS 320: Lab Notebook; Daily work; Lesson Design; Student created Instructional Activities; Mid Term; Final Exam</p>
<p>13047.3 Inquiry The program requires study of the processes of science common to all scientific fields.</p>	<p>PHYS 320 Physical Science for Teachers EDUC 470: Methods of Secondary Science</p>	<p>Mid-term; Final; Lesson Plans; Field Lessons Lab Notebook; Daily work; Lesson Design; Student created Instructional Activities; Mid Term; Final Exam</p>
<p>13047.4 Context of Science The program requires the study of the effect of social and technological context on the study of science and on the application and valuing of scientific knowledge. The program prepares candidates to relate science to the daily lives and interests of students and to a larger framework of human endeavor and understanding. The program provides the candidate with an understanding of the relationship of science to industry, business, government, and multicultural aspects of a variety of communities.</p>	<p>PHYS 320 Physical Science for Teachers EDUC 470: Methods of Secondary Science</p>	<p>Lab Notebook; Daily work; Lesson Design; Student created Instructional Activities; Mid Term; Final Exam Lesson Plans; Field Lessons Mid-term; Final;</p>
<p>13047.5 Skills of Teaching The program requires the candidate to demonstrate proficiency in methods of teaching science.</p>	<p>EDUC 470: Methods of Secondary Science EDUC 360 Practicum II</p>	<p>Lesson Plans; Field Lessons; Mid-term; Final; Assessment Rubirc</p>
<p>13047.6 Curriculum The program provides candidates with information necessary to identify, evaluate, and apply a coherent, focused science curriculum that is consistent with state and national standards for science education and appropriate for addressing the needs, abilities and interests of students.</p>	<p>EDUC 310 Introduction to Exceptional Learners EDUC 329 Curriculum Planning and Evaluation</p>	<p>Portfolio, Midterm/Final Final Presentations of Curriculum Maps, Final Essay Exam</p>



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers

<p>13047.7 Assessment The program prepares candidates to use a variety of performance</p>	<p>EDUC 329 Curriculum Planning and Evaluation</p>	<p>Final Presentations of Curriculum Maps, Final Essay Exam</p>
<p>assessment strategies to evaluate the intellectual, social, and personal development of the learner in all aspects of science.</p>	<p>EDUC 414 Student Teaching Elementary and Secondary</p>	<p>EDUC 414: assessment design embedded in lesson design</p>
<p>13047.8 Environment for Learning The program prepares candidates to design and manage safe and supportive learning environments in the classroom, laboratory, and field. The program reflects high expectations for the success of all students.</p>	<p>EDUC 375 Reading in the Content Area EDUC 329 Curriculum Planning and Evaluation EDUC 415 Student Teaching</p>	<p>Final Unit Plan; Midterm/Final Final Presentations of Curriculum Maps, Final Essay Exam Video Reflections, Midterm/Final Assessments, e-Portfolio</p>
<p>13047.9 Professional Practice The program prepares candidates to participate in the professional community, improving practice through their personal actions, education, and development. The program uses varied performance assessments of candidate’s understanding and ability to apply that knowledge.</p>	<p>EDUC 350 Practicum I EDUC 360 Practicum II EDUC 414 Student Teaching EDUC 415 Student Teaching Seminar</p>	<p>Assessment Rubric Assessment Rubric Midterm/Final Assessment Rubric, e-Portfolio Video/Reflections</p>
<p>13047.10 Technology The program requires the study of current, appropriate instructional technologies. The program uses varied performance assessments of candidates’ understanding and abilities to apply that knowledge.</p>	<p>EDUC 300 Education Technology</p>	<p>e-Portfolio</p>



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers

- 3. Evidence of Addressing the Standards:** For each ESPB program standard listed below, provide a short narrative describing how the program addresses the standard (for example, identify course objectives, activities and related experiences).
- a. **13047.1 Composite Science Major/General Science** The composite/general science program must include environmental science incorporated within other courses or as a separate course. The composite/general science program requires:
- i. Coursework in biology, chemistry, physics, and earth science, including:
 1. Minimum of twenty four semester hours in one area.
[GEOL 106 Earth Through Time \(4\)](#) [BIOL 150 General Biology I/Lab \(4\)](#)
[BIOL 151 General Biology II/Lab \(4\)](#)
[CHEM 121 Chemistry I/Lab \(4\)](#)
[CHEM 122 Chemistry II/Lab \(4\)](#)
[PHYS 211 Physics/Lab \(4\)](#)
 2. Minimum of twelve semester hours in two other areas.
[CHEM 380 Environmental Chemistry \(4\)](#)
[CHEM 301 Biochemistry \(4\)](#)
[GEOL105 Physical Geology \(4\)](#)
[GEOL 320 Oceanography \(3\)](#)
[GEOL 450 Sedimentology & Stratigraphy \(4\)](#)
[GEOL 101 Environmental Geology](#)
[PHYS 212 College Physics II \(4\)](#)
[PHYS 275 Planetary Science \(3\)](#)
[PHYS 320 Physical Science for Teachers \(4\)](#)
 3. Minimum of four semester hours in the fourth area.
[BIOL170 General Zoology \(4\)](#) [BIOL 363 Entomology \(4\)](#)
[BIOL 220 Anatomy/Physiology I \(4\)](#)
BIOL Electives
 4. Courses must be from those that the institution allows toward graduation in the science major.
 - ii. Study of mathematics through the pre-calculus level (college algebra and above) and statistics..
[MATH 111 \(Algebra I\) \(or\)](#)
[MATH 112 \(Algebra II\)](#)
[MATH 103 \(University Algebra\)](#)
[MATH 240 Applied Statistics](#)



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers

MATH 105 Pre-Calculus or Trig

- b. **13047.2 Nature of Science** The program requires study of the history and philosophy of science as well as the interrelationships among the sciences.
[EDUC 470 Science Methods and Materials](#) –Secondary: This course is designed to explore various pedagogical methods of science instruction using inquiry into the nature of science, and philosophy of the Native perspective. Students have several opportunities to integrate real-world experiences into these models
- c. **13047.3 Inquiry** The program requires study of the processes of science common to all scientific fields.
[PHYS 211 College Physics I/Lab](#) – Candidates develop subjective knowledge and/or skill in calculating in areas - measurement and problem solving, vectors/trig/graphing, velocity/acceleration, concurrent/parallel forces, two-dimensional/periodic motion, conservation of energy/momentum, phases of matter, and heat measurement.
[PHYS 212 College Physics II/Lab](#) – Candidates study laws of electricity and magnetism, optics, and selected topics from modern physics (heat engines, waves – sound & light, reflection, refraction, diffraction and polarization, electrostatics, DC circuits, heating/chemical effects, magnetic effects, and AC circuits.
[EDUC 470 Science Methods and Materials](#) –Secondary: Candidates recognize the central content areas of science and are able to apply their knowledge of science to develop active, engaging, age-specific learning experiences. Candidates also become skilled in evaluating student engagement and application of scientific concepts in the classroom.
- d. **13047.4 Context of Science** The program requires the study of the effect of social and technological context on the study of science and on the application and valuing of scientific knowledge. The program prepares candidates to relate science to the daily lives and interests of students and to a larger framework of human endeavor and understanding. The program provides the candidate with an understanding of the relationship of science to industry, business, government, and multicultural aspects of a variety of communities.
[EDUC 414 Student Teaching](#): Students incorporate best teaching practice in a culturally competent perspective throughout their lessons. Secondary students are expected to engage in all science discipline areas, as part of their experience, when possible, as they design lesson plans and take full responsibility for instruction in the classroom.
[EDUC 470 Science Methods and Materials](#) – Secondary: Candidates explore various pedagogical methods of science instruction using inquiry into the nature of science and the philosophy of Native Ways of Knowing. Candidates are provided several opportunities to integrate real-world experiences into these models.
- e. **13047.5 Skills of Teaching** The program requires the candidate to demonstrate proficiency in methods of teaching science.



North Dakota Education Standards and Practices Board Initial Program Report for the Preparation of Composite Science Teachers

[EDUC 360 Practicum II](#): Practicum II is a field-based experience that offers the opportunity for the candidate to apply theoretical knowledge in a real world setting. During Practicum

II, candidates develop the ability to recognize best teaching practice and describe (in detail) learner-teacher interactions in the classroom. Candidates then synthesize the practicum experience in a reflective paper utilizing field notes.

[EDUC 414 Student Teaching](#): Students incorporate best teaching practice in a culturally competent perspective throughout their lessons. Secondary students are expected to engage in all science discipline areas, as part of their experience, when possible, as they design lesson plans and take full responsibility for instruction in the classroom.

[EDUC 415 Student Teaching Seminar](#): This seminar covers Science as Inquiry—an awareness that observation and understandings of nature and ecological relationships traditionally formed an essential base of knowledge for the American Indians in the development and improvement of tools and technologies. Exploration of science from an American Indian perspective includes Science Technology, science in personal and social perspectives, and the history of science i.e. contributions of American Indians to medicine, botany, and psychology.

[EDUC 470 Science Methods and Materials](#) – Secondary: Candidates explore various pedagogical methods of science instruction using inquiry into the nature of science and the philosophy of Native Ways of Knowing. Candidates are provided several opportunities to integrate real-world experiences into these models.

f. **13047.6 Curriculum** The program provides candidates with information necessary to identify, evaluate, and apply a coherent, focused science curriculum that is consistent with state and national standards for science education and appropriate for addressing the needs, abilities and interests of students.

[EDUC 470 Science Methods and Materials](#) – Secondary Candidates recognize the central content areas of science and are able to apply their knowledge of science to develop active, engaging, age-specific learning experiences. Candidates also become skilled in evaluating student engagement and application of scientific concepts in the classroom.

g. **13047.7 Assessment** The program prepares candidates to use a variety of performance assessment strategies to evaluate the intellectual, social, and personal development of the learner in all aspects of science.

[EDUC 470 Science Methods and Materials](#) – Secondary: In the process of exploring various pedagogical methods of science instruction using inquiry into the nature of science and the philosophy of Native Ways of Knowing, candidates also explore the connectedness of inquiry, assessment, technology in the classroom, content standards, common core, instructional planning, and testing. Thus, candidates develop a deeper understanding of the need to design assessment tools that best assess expected outcomes.

h. **13047.8 Environment for Learning** The program prepares candidates to design and manage safe and supportive learning environments in the classroom,



North Dakota Education Standards and Practices Board Initial Program Report for the Preparation of Composite Science Teachers

laboratory, and field. The program reflects high expectations for the success of all students.

[EDUC 375 Reading in the Content Area](#): The candidate learns how to use a variety of reading and writing strategies to encourage learners to develop deep understanding of science content presented. In addition, candidate learns to identify and apply assessment strategies appropriate to literacy needs of their students in order to address learning goals. Candidates must also plan instruction that meets rigorous learning goals while supporting the learning needs of every learner in the classroom.

- i. **13047.9 Professional Practice** The program prepares candidates to participate in the professional community, improving practice through their personal actions, education, and development. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

[EDUC 360 Practicum II](#): Practicum II is a field-based experience that offers the opportunity for the candidate to apply theoretical knowledge in a real world setting. During Practicum II, candidates develop the ability to recognize best teaching practice and describe (in detail) learner-teacher interactions in the classroom. Candidates then synthesize the practicum experience in a reflective paper utilizing field notes.

[EDUC 414 Student Teaching](#): Students incorporate best teaching practice in a culturally competent perspective throughout their lessons. Secondary students are expected to engage in all science discipline areas, as part of their experience, when possible, as they design lesson plans and take full responsibility for instruction in the classroom.

[EDUC 415 Student Teaching Seminar](#): This seminar covers Science as Inquiry—an awareness that observation and understandings of nature and ecological relationships traditionally formed an essential base of knowledge for the American Indians in the development and improvement of tools and technologies. Exploration of science from an American Indian perspective includes Science Technology, science in personal and social perspectives, and the history of science i.e. contributions of American Indians to medicine, botany, and psychology.

- j. **13047.10 Technology** The program requires the study of current, appropriate instructional technologies. The program uses varied performance assessments of candidates' understanding and abilities to apply that knowledge.

[EDUC 300 Education Technology](#): Candidates explore teaching and learning through technology. Embedded in the process are methods of instruction that include on-line and direct instruction, discussion, collaborative group work, peer teaching, and hands-on demonstrations. Within the framework of studying methods, candidates demonstrate selection of technology tools and application of technology using interactive boards, Flip Charts, Webquests, Virtual Field experiences and other technology instruments to enhance lesson planning. Candidates are expected to apply knowledge acquired in EDUC 300 during EDUC 414/415 – Student Teaching and Student Teaching Seminar as they continue work building their e-portfolios with lessons and units created during the course of student teaching. Further, candidates are expected to apply technology skills in the design and delivery of instruction.

- k. **Evidence of Meeting the Standards:** It is expected that your program makes use of multiple assessments to ensure that all standards are met. If the program is offered in



**North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers**

more than one site or in more than one method (e.g. online as well as face-to-face) provide aggregated (program level) AND disaggregated (site or method specific) data.

Complete tables 4.1-4.4 described below in 4a and provide information requested related to the two-four additional assessments you selected in 4b.

a. The following assessments are required:

- i. Praxis II: Content Test: Complete Table 4.1 reporting at least 3 years of data

[2013-2016]				
Content Area Test Name and Number	ND Passing Score	Total # of Test Takers	Average Score	Percent Passing
5435/0435-General Science Content Knowledge	150	6	No data	No data

- ii. Praxis II: PLT (Principles of Learning and Teaching): Complete Table 4.2 reporting at least 3 years

[2013-2016]				
Content Area Test Name and Number	ND Passing Score	Total # of Test Takers	Average Score	Percent Passing



**North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers**

5624/0624-PLT 7-12	157	6	No data	No data
-----------------------	-----	---	---------	---------

- iii. Cumulative GPA at the point of completion: Complete Table 4.3 reporting at least 3 years of data (Courses included in the calculation must be **required for all** candidates.)

Year	N (number of candidates)	Overall Average GPA	Range of GPA
2015-2016	1	4.0	4.0
2014-2015	2	No Data	No Data
2013-2014	4	3.37	3.05-3.99

- iv. Student Teaching Performance (Clinical Experience) Evaluation (please report data only in the area of content knowledge). 1. Build Table 4.4 that includes the following:
- a. The N (number of candidates)
 - b. Proficiency scale (e.g. Beginning, progressing, proficient, exceeds proficient)
 - c. Performance results at each proficiency level (at least 3 years of data)
2. Attach an electronic copy of the performance instrument ([Appendix ?](#))
- 3.

Assessment	2013-14	2014-15	2015-16	2016-17
e-Portfolio	No Data	No Data	No Data	Pending



**North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers**

Graduate Surveys	No Data	No Data	No Data	No Data
Employer Surveys	No Data	No Data	No Data	No Data

b. Additionally, select from among the following assessment for a total of 6-8. For each provide a description of the assessment, a data table showing three years of results, an electronic copy of the assessment instrument (test, project, paper, etc.) and where appropriate the rubric or scoring guide):

- i. Pre-student Teaching Practicum Evaluations
- ii. Key Performance Tasks
- iii. Capstone Project (portfolio, teacher work sample, etc.)
- iv. Employer survey results related to content knowledge
- v. Graduate survey results related to content knowledge
- vi. Additional assessment of choice

No data to report.



North Dakota Education Standards and Practices Board
Initial Program Report for the Preparation of
Composite Science Teachers

c. Respond to the following questions:

- i. Analysis of findings: Describe how the data provided above demonstrate that candidates in the program meet the standards?
- ii. Response to findings: What changes have you made in your program as a result of data analysis? Provided a rationale for your decision.

No data to report.