

**Program Report for the
Preparation of Composite/General Science Teachers**

Education Standards and Practices Board

C O V E R S H E E T

Institution: University of North Dakota **State:** ND

Date Submitted: January, 2008

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Program documented in this report:

Name of Institution's program: Composite Science

Grade levels for which candidates are being prepared: 7-12

Degree or award level: B.S. Ed with major in Science

Is this program offered at more than one site? ☐ Yes ☒ No

If yes, list sites at which the program is offered: _____

Title of the state license for which candidates are prepared

General Science/Composite Science

Program report status:

☒ Initial review

☐ Rejoinder

☐ Response to national recognition with conditions

State licensure requirement for national recognition:

ESPB requires 80% of the program completers who have taken the test to pass the applicable state licensure test for the content field, if the state has a testing requirement. Does your institution require such a test? Test information and data must be reported in Section II

☒ Yes ☐ No

REPORT

I. Contextual Information – Provides the opportunity for institutions to present general information to help reviewers understand the program.

Candidate Information

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, post-baccalaureate, alternate routes, master's, doctorate) being addressed in this report.

Program: Composite/General Science		
Academic Year	# of Candidates Enrolled in the Program	# of Program Completers
Sum04-Spr05	5	3
Sum05-Spr06	4	0
Sum06-Spr07	5	1

I. Contextual Information & Program Response To ESPB Standards

Program: Composite Science

Descriptive Information About the Program (In a paragraph or two, describe the program-this is your chance to put your best programmatic foot forward.)

Response to Standards

Directions: For each ESPB Standard listed below, respond to each question listed. You must include a minimum of 3 assessments that provide evidence that ALL standards are met. You may use more than three if you wish and you may use the same assessments for different standards as appropriate.

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:

- coursework in biology, chemistry, physics, and earth science, including:
 - a. minimum of 24 semester hours in one area,
 - b. minimum of 12 semester hours in two other areas,
 - c. minimum of 4 semester hours in the fourth area,
 - courses must be from those that the institution allows toward graduation in the science major;
- study of mathematics through the pre-calculus level (college algebra and above) and statistics.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

This content standard is met in each department as described in the requirements for the Composite Science Major in the College Catalog.

B.S.ED. WITH MAJOR IN SCIENCE

Required 146 credits (36 of which must be numbered 300 or above and 60 of which must be from a 4-year institution) including:

I. General Education Requirements (see University GER listing).

II. EHD General Graduation Requirements (see EHD listing).

III. The Following Science Curriculum:

- A. Minimum of 24 semester hours in ONE of the four science areas (biology, chemistry, physics or earth science) through completion of a minor (24)
- B. Minimum of 12 semester hours in your choice of each of two other areas as follows, plus a minimum of four semester hours in the fourth area (28)

1. Physics

211/211L	College Physics I & Lab	(4)
212/212L	College Physics II & Lab	(4)
253/253L	University Physics III & Lab (requires dept. approval to waive Calculus III)	(4)
Or		
213/213L	College Physics III & Lab	(4)
Or		
251/251L	University Physics I & Lab	(4)
252/252L	University Physics II & Lab	(4)
253/253L	University Physics III & Lab (requires departmental approval)	(4)

2. Chemistry

		(4)
121/121L	General Chemistry I & Lab	
122/122L	General Chemistry II & Lab	(4)
333/333L	Introduction to Environmental, Clinical & Forensic Analysis & Lab	(4)

3. Earth Science

Phys 110/110L	Introductory Astronomy & Lab	(4)
Geol 101, 101L	Introduction to Geology and Lab	(4)
Or		
Geol 102, 102L	The Earth Through Time and Lab	(4)
And		
Geog 121/121L	Global Physical Environment & Lab	(4)
Or		
Geog 134/134L	Introduction to Global Climate & Lab	(4)

4. Biology

Biol 150/ 150L	General Biology I & Lab	(4)
Biol 151/ 151L	General Biology II & Lab	(4)
Biol 312	Evolution	(4)
And		
Biol 315	Genetics	(4)
Or		
Biol 332/332L	General Ecology & Lab	(4)
Or		
Biol 336	Systematic Botony	(4)

C. Minimum 8 credits of Math as follows:

Math 165	Calculus I	(4)
Math 166	Calculus II	(4)

D. Minimum of 3 semester hours of statistics selected from among the following:

Math 321	Applied Statistical Methods	(3)
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- Or
 Psyc 241 Introduction to Statistics (4)
 Or Introduction to Business and Economic Statistics (3)

IV. [T&L 401](#), School Science Safety (1)

- a. In addition, these tasks are taught in T&L 400 Secondary Science Methods and Materials.
- Lesson Plan is a critical task and a link to these lessons on Livetext is provided here:
 - Students perform Demonstrations in T&L 400 to provide evidence of their ability to plan and present a demonstration related to their subject area, to ask appropriate questions and to evaluate student performance.
 - Students prepare a Performance Based Test, set up the test and administer the test, and evaluate student performance using a prepared rubric. Students learn to use video equipment and i-Movie software to prepare a record of the Performance Test Item and to use the video to evaluate student performance as well as to demonstrate proficiency with this technology.
 - Students prepare Multiple Choice Questions that incorporate Higher Order Thinking Skills and demonstrate student ability to provide multilevel questioning in the multiple choice format and to provide suitable answers with appropriate distractors.
 - Students prepare Open Ended Questions appropriate to their subject and develop rubrics for scoring the answers.

Assessments

- General Science Praxis II Exam
- Departmental exams, labs, tests

Results

- Praxis II results for General/Composite Science

Fall, 2006-Summer				
Program Area	ND Passing Score	Total Test Takers	Average Score	Percent Passing
General Science-10435	150	1	147	0%*

N of 1 is too small to draw conclusions about the quality of the program overall.

Content knowledge acquisition is demonstrated by students passing appropriate courses as required for licensure. It is difficult to evaluate this standard since the standard has been in place only since 2006 and there is an N less than 10.

- Departments of Biology, Chemistry, Geology and Physics monitor for extent to which their students, including our candidates perform successfully in coursework, exams, labs, tests etc. Results of student performance are available for each of the

sciences within their separate program reports under Standard 130XX.1. A Link to those reports is provided below:

Biology: [ESPB Report Biology](#)
Geology: [ESPB Report Earth Science](#)

Physics: [ESPB Report Physics](#)
Chemistry: [ESPB Report Chemistry](#)

Student Work Samples: Samples of student work provided by these departments may be reviewed electronically within their separate program reports by clicking on the links provided above. In addition, hard copy samples will be available in the exhibit room at the time of the on-campus visit.

For T&L 400: Methods, samples of CD's of student Performance Test Videography, Demonstration planning, open ended questions with scoring rubric, multiple choice question writing, observation list for evaluating a school science program, and question list for science job interview with administrators will be available in the Hard Copy exhibits room.

13010.2, 13020.2, 13035.2, 13045.2, 13047.2, 13050.2 NATURE OF SCIENCE

The program requires study of the history and philosophy of science as well as the interrelationships among the sciences. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

The courses taught in the various science departments all include lecture and laboratory activities that clearly focus on the Nature of Science. List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard. This content is met individually in each science area. To access information see 130XX.2 in the reports listed:

Biology: [ESPB Report Biology](#)
Geology: [ESPB Report Earth Science](#)

Physics: [ESPB Report Physics](#)

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

Assessments

- a. General Science Praxis II Exam
- b. Departmental exams, labs, tests
- c. T&L 400 Course Grades

Results

- a. Praxis II results for Biology

Fall, 2006-Summer				
Program Area	ND Passing Score	Total Test Takers	Average Score	Percent Passing
General Science-10435	150	1	147	0% *

* N of 1 is too small to draw conclusions about the quality of the program overall.

b. Departments of Biology, Chemistry, Geology and Physics monitor for extent to which their students, including our candidates perform successfully in coursework, exams, labs, tests etc. Results of student performance are available for each of the sciences within their separate program reports under Standard 130XX.1. A Link to those reports is provided below:

Biology: [ESPB Report Biology](#)

Physics: [ESPB Report Physics](#)

Geology: [ESPB Report Earth Science](#)

Chemistry: [ESPB Report Chemistry](#)

c. T&L 400 Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

Student Work Samples: Samples of student work provided by these departments may be reviewed electronically within their separate program reports by clicking on the links provided above. In addition, hard copy samples will be available in the exhibit room at the time of the on-campus visit.

13010.3, 13020.3, 13035.3, 13045.3, 13047.3, 13050.3 INQUIRY

The program requires study of the processes of science common to all scientific fields. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

Courses taught in the various science departments are inquiry based according to the definition of inquiry provided by the National Science Education Standards. Members of the various science departments have knowledge of the Inquiry Standard many have been involved in developing teacher focused courses designed to promote Inquiry style teaching. List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard. This content is met individually in each science area. To access information see 130XX.3 in these reports.

Biology: [ESPB Report Biology](#)

Physics: [ESPB Report Physics](#)

Geology: [ESPB Report Earth Science](#)

Chemistry: [ESPB Report Chemistry](#)

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

- a. Students enrolled in science courses demonstrate inquiry as defined by the National Science Education Standards, specifically problem identification and data gathering to arrive at a solution.
- b. Students enrolled in T&L 400, Science Teaching Methods are required to prepare demonstrations. Examples of student work provided.
- c. Students enrolled in T&L 400, Science Teaching Methods write an analysis of an National Science Teachers Association recognized exemplary curriculum (SEPUP, Science Education for Public Understanding) that emphasizes inquiry based science related to social issues. (Examples of student work provided).

Assessments

- a. General Science Praxis II Exam
- b. Departmental exams, labs, tests
- c. T&L 400 Course Grades

Results

- a. Praxis II results for Biology

Fall, 2006-Summer				
Program Area	ND Passing Score	Total Test Takers	Average Score	Percent Passing
General Science-10435	150	1	147	0%*

* N of 1 is too small to draw conclusions about the quality of the program overall.

- b. Departments of Biology, Chemistry, Geology and Physics monitor for extent to which their students, including our candidates perform successfully in coursework, exams, labs, tests etc. Results of student performance are available for each of the sciences within their separate program reports under Standard 130XX.1. A Link to those reports is provided below:

Biology: [ESPB Report Biology](#)

Physics: [ESPB Report Physics](#)

Geology: [ESPB Report Earth Science](#)

Chemistry: [ESPB Report Chemistry](#)

- c. T&L 400 Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

Student Work Samples: Samples of student work provided by Departments of Biology, Chemistry, Geology and Physics may be reviewed electronically within their separate program reports by clicking on the links provided above. In addition, hard copy samples will be available in the exhibit room at the time of the on-campus visit.

13010.4, 13020.4, 13035.4, 13045.4, 13047.4, 13050.4 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. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard. This content is met individually in each science area. To access information see 130XX.4 in these reports.

Biology: [ESPB Report Biology](#)
Geology: [ESPB Report Earth Science](#)

Physics: [ESPB Report Physics](#)
Chemistry: [ESPB Report Chemistry](#)

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

- a. Students enrolled in T&L 400, Science Teaching Methods write an analysis of an National Science Teachers Association recognized exemplary curriculum (SEPUP, Science Education for Public Understanding) that emphasizes inquiry based science related to social issues. (Examples of student work provided in Hard Copy exhibits).
- b. Students enrolled in T&L 400, Science Teaching Methods write an analysis of an National Science Teachers Association recognized exemplary curriculum (SEPUP, Science Education for Public Understanding) that emphasizes inquiry based science related to social issues. (Examples of student work provided provided in Hard Copy exhibits).
- c. Students enrolled in T&L 400, Science Teaching Methods perform laboratory experiments from SEPUP and subsequently write an analysis of an National Science Teachers Association recognized exemplary curriculum (SEPUP, Science Education for Public Understanding) that emphasizes inquiry based science related to social issues. (Examples of student work provided provided in Hard Copy exhibits).
- d. Students complete analysis of controversial issues that might arise during classroom discussion, and they develop methods to deal with and discuss controversial issues, especially those that have Supreme Court decisions to support the science teaching, (e.g., Evolution), Stem Cell Research, Manned and Unmanned Space Exploration, Conservation of Natural Resources, etc.

Assessments

- a. General Science Praxis II Exam
- b. Departmental exams, labs, tests

c. T&L 400 Course Grades

Results

a. Praxis II results for Biology

Fall, 2006-Summer				
Program Area	ND Passing Score	Total Test Takers	Average Score	Percent Passing
General Science-10435	150	1	147	0%*

* N of 1 is too small to draw conclusions about the quality of the program overall.

b. Departments of Biology, Chemistry, Geology and Physics monitor for extent to which their students, including our candidates perform successfully in coursework, exams, labs, tests etc. Results of student performance are available for each of the sciences within their separate program reports under Standard 130XX.4. A Link to those reports is provided below:

Biology: [ESPB Report Biology](#)

Physics: [ESPB Report Physics](#)

Geology: [ESPB Report Earth Science](#)

Chemistry: [ESPB Report Chemistry](#)

Student Work Samples: Departments of Biology, Chemistry, Geology and Physics, monitor the extent to which their students, including our candidates perform successfully in coursework, exams, labs, tests etc. Samples of student work provided by these departments may be reviewed electronically within their separate program reports by clicking on the links provided above. In addition, hard copy samples will be available in the exhibit room at the time of the on-campus visit.

13010.5, 13020.5, 13035.5, 13045.5, 13047.5, 13050.5 SKILLS OF TEACHING

The program requires the candidate to demonstrate proficiency in methods of teaching science. The program uses varied performance assessments of the candidate's understanding and ability to apply that knowledge.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

A copy of the syllabus from T&L 400, Science Teaching Methods is included that requires students to prepare and present demonstrations, assessments, and lesson plans. Students spend time in class observing various styles of presentation for labs, demonstrations, and assessment. Then they develop and present their own lessons, demonstrations, assessments, and grading (using rubrics and gradepower.com (a free website developed by Dr. Helgeson for teachers to use in grading student progress)). The syllabus includes a variety of activities

by which students learn how to promote the development and use of a variety of science skills, e.g., measurement, observation, inference, data analysis, data presentation, etc.

Assessments

- a. Course Grades
- b. Student Teaching Evaluations

Results

- a. Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

- b. Student Teaching Evaluation

Composite Science Fall 06-Spring 07	Mid Term N=1				Final N=1			
	Deficient	Developin g	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
1. Demonstrates knowledge of content:	0%	100%	0%	0%	0%	0%	100%	0%
2. Demonstrates knowledge of human development through appropriate interaction, activities & attitude:	0%	100%	0%	0%	0%	0%	100%	0%
3. Recognizes individual differences and gives opportunities for diverse learners to learn:	0%	100%	0%	0%	0%	0%	100%	0%
4. Employs diverse teaching strategies:	0%	100%	0%	0%	0%	0%	100%	0%
5. Demonstrates competence in employing appropriate technology:	0%	100%	0%	0%	0%	0%	100%	0%
6. Fosters a safe, compassionate, and respectful educational environment that	0%	100%	0%	0%	0%	0%	100%	0%

promotes learning:								
7. Guides student behavior effectively and appropriately:	0%	100%	0%	0%	0%	0%	100%	0%
8. Express ideas articulately in written and oral communication:	0%	100%	0%	0%	0%	0%	100%	0%
9. Solicits suggestions and feedback from other and is receptive to them:	0%	100%	0%	0%	0%	0%	100%	0%
10. Plans and designs creative, organized, effective, and appropriate lessons and units:	0%	100%	0%	0%	0%	0%	100%	0%
11. Uses appropriate informal and/or formal assessment method to evaluate:	0%	100%	0%	0%	0%	0%	100%	0%
12. Analyzes own performance and seeks sources of improvement:	0%	0%	100%	0%	0%	0%	100%	0%
13. Maintains professional conduct-punctuality, interaction with others, preparedness, and initiative:	0%	0%	100%	0%	0%	0%	100%	0%
14. Established effective relationships with parents, participates in school and community projects:	0%	0%	100%	0%	0%	0%	100%	0%

Evaluations at both mid and end student teaching show that the candidate is proficient in the teaching of science.

Student Work Samples related to teach are available in the Hard Copy exhibits.

13010.6, 13020.6, 13035.6, 13045.6, 13047.6, 13050.6 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. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

Students conduct experiments and activities from three major curriculum projects: Project WET, Project Learning Tree, and SEPUP (Science Education for Public Understanding Program). All these curriculum projects are recognized at the national level as exemplary science education programs and all address the National Science Education Standards. Students are required to become members of the National Science Educators Association (NSTA), for which they receive a quarterly newspaper that addresses recent legislation, new curriculum, content and material evaluation of new books and science supplies. In addition students receive information about regional and national science education conferences.

Assessments

- a. Course Grades
- b. Student Teaching Evaluations

Results

- a. Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

- b. Student Teaching Evaluation

Composite Science Fall 06-Spring 07	Mid Term N=1				Final N=1			
	Deficient	Developin g	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
1. Demonstrates								

knowledge of content:	0%	100%	0%	0%	0%	0%	100%	0%
2. Demonstrates knowledge of human development through appropriate interaction, activities & attitude:	0%	100%	0%	0%	0%	0%	100%	0%
3. Recognizes individual differences and gives opportunities for diverse learners to learn:	0%	100%	0%	0%	0%	0%	100%	0%
4. Employs diverse teaching strategies:	0%	100%	0%	0%	0%	0%	100%	0%
5. Demonstrates competence in employing appropriate technology:	0%	100%	0%	0%	0%	0%	100%	0%
6. Fosters a safe, compassionate, and respectful educational environment that promotes learning:	0%	100%	0%	0%	0%	0%	100%	0%
7. Guides student behavior effectively and appropriately:	0%	100%	0%	0%	0%	0%	100%	0%
8. Express ideas articulately in written and oral communication:	0%	100%	0%	0%	0%	0%	100%	0%
9. Solicits suggestions and feedback from other and is receptive to them:	0%	100%	0%	0%	0%	0%	100%	0%
10. Plans and designs creative, organized, effective, and appropriate lessons and units:	0%	100%	0%	0%	0%	0%	100%	0%

11. Uses appropriate informal and/or formal assessment method to evaluate:	0%	100%	0%	0%	0%	0%	100%	0%
12. Analyzes own performance and seeks sources of improvement:	0%	0%	100%	0%	0%	0%	100%	0%
13. Maintains professional conduct-punctuality, interaction with others, preparedness, and initiative:	0%	0%	100%	0%	0%	0%	100%	0%
14. Established effective relationships with parents, participates in school and community projects:	0%	0%	100%	0%	0%	0%	100%	0%

Evaluations at both mid and end student teaching show that the candidate is proficient in the knowledge about teaching of science.

13010.7, 13020.7, 13035.7, 13045.7, 13047.7, 13050.7 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. Where in your program do candidates have the opportunity to address/meet this standard?

T&L 400 Secondary Science Methods syllabus attached that shows the requirement to develop assessments of student content knowledge, skills, and problem solving strategies.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

T&L 400 Secondary Science Methods syllabus attached that shows the requirement to develop assessments of student content knowledge, skills, and problem solving strategies.

Students prepare Multiple Choice exam questions, Open ended exam questions with accompanying rubrics, and Performance Based Assessment and Rubrics. The course includes extensive discussion of National and State testing for teachers and high school and middle school students.

Assessments

- a. Course Grades
- b. Student Teaching Evaluations

Students are also evaluated by their in-class discussion and performance related to this standard. The professor teaching the course spends a significant amount of time on the problem of relating the type of assessment to the activities in class and to the style of teaching a lesson. In addition students learn how to assign and defend weighted grades using the website [grade-power.com](http://www.grade-power.com). In that web site they learn how to communicate with students about grades, weight and give grades, and student teachers engage in extensive discussion on the philosophies and ideologies related to grades, evaluation, and assessment.

Results

- a. Course Grades

Fall 06 & Fall 07 Methods and Materials - Science					
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

- b. Student Teaching Evaluation

Composite Science Fall 06-Spring 07	Mid Term N=1				Final N=1			
	Deficient	Developin g	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
1. Demonstrates knowledge of content:	0%	100%	0%	0%	0%	0%	100%	0%
2. Demonstrates knowledge of human development through appropriate interaction, activities & attitude:	0%	100%	0%	0%	0%	0%	100%	0%
3. Recognizes individual differences and gives opportunities for diverse learners to learn:	0%	100%	0%	0%	0%	0%	100%	0%

4. Employs diverse teaching strategies:	0%	100%	0%	0%	0%	0%	100%	0%
5. Demonstrates competence in employing appropriate technology:	0%	100%	0%	0%	0%	0%	100%	0%
6. Fosters a safe, compassionate, and respectful educational environment that promotes learning:	0%	100%	0%	0%	0%	0%	100%	0%
7. Guides student behavior effectively and appropriately:	0%	100%	0%	0%	0%	0%	100%	0%
8. Express ideas articulately in written and oral communication:	0%	100%	0%	0%	0%	0%	100%	0%
9. Solicits suggestions and feedback from other and is receptive to them:	0%	100%	0%	0%	0%	0%	100%	0%
10. Plans and designs creative, organized, effective, and appropriate lessons and units:	0%	100%	0%	0%	0%	0%	100%	0%
11. Uses appropriate informal and/or formal assessment method to evaluate:	0%	100%	0%	0%	0%	0%	100%	0%
12. Analyzes own performance and seeks sources of improvement:	0%	0%	100%	0%	0%	0%	100%	0%
13. Maintains professional conduct-punctuality, interaction with others, preparedness,	0%	0%	100%	0%	0%	0%	100%	0%

and initiative:								
14. Established effective relationships with parents, participates in school and community projects:	0%	0%	100%	0%	0%	0%	100%	0%

Evaluations at both mid and end student teaching show that the candidate is proficient in the knowledge about teaching of science and assessment of student learning.

Student Work Samples: I-movies of projects as well as sample of student work are available in Hard Copy Exhibits

13010.8, 13020.8, 13035.8, 13045.8, 13047.8, 13050.8

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. The program uses varied performance assessments of candidate's understanding and ability to apply that knowledge.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

[T&L 401 School Science Safety - Science:](#) Prepares students to plan for and communicate about a wide variety of classroom and laboratory safety issues. Health and safety issues are examined for the classroom teacher and the students in all science courses, including electrical safety, biological safety, chemical use, storage and disposal, legal issues, liability reduction and cost control are also addressed in detail.

T&L 400 Secondary Science Teaching Methods and T&L 401 School Science Safety address these standards. Syllabi show that students develop observational lists that help them to clarify in their own minds what an ideal laboratory/science environment should be. With regard to safety in the science room students are required to carry out evaluations of classroom in existing schools, assess ventilation within the classroom, assess storage and disposal procedures for chemicals, and to understand the safety requirements in Chemistry, Biology, Physics, Environmental studies, and on field trips. They learn extensively about the law and teacher responsibility in maintaining a safe learning environment.

Students must pass examinations in Safety related to the areas Chemical, Biological, and Physics science safety as part of this course.

Assessments

- a. Course Grades
 1. T&L 400
 2. T&L 401
- b. Student Teaching Evaluations
- c. Safety Exam Results

Results

A.1 Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

A.2 Course Grades

Fall 07		School Safety - Science			
T&L 400	A	B	C	D	F
N=5	5/100%	—	—	—	—

b. Student Teaching Evaluation

Composite Science Fall 06-Spring 07	Mid Term N=1				Final N=1			
	Deficient	Developing	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
1. Demonstrates knowledge of content:	0%	100%	0%	0%	0%	0%	100%	0%
2. Demonstrates knowledge of human development through appropriate interaction, activities & attitude:	0%	100%	0%	0%	0%	0%	100%	0%
3. Recognizes individual differences and gives opportunities for diverse learners to learn:	0%	100%	0%	0%	0%	0%	100%	0%
4. Employs diverse teaching	0%	100%	0%	0%	0%	0%	100%	0%

strategies:								
5. Demonstrates competence in employing appropriate technology:	0%	100%	0%	0%	0%	0%	100%	0%
6. Fosters a safe, compassionate, and respectful educational environment that promotes learning:	0%	100%	0%	0%	0%	0%	100%	0%
7. Guides student behavior effectively and appropriately:	0%	100%	0%	0%	0%	0%	100%	0%
8. Express ideas articulately in written and oral communication:	0%	100%	0%	0%	0%	0%	100%	0%
9. Solicits suggestions and feedback from other and is receptive to them:	0%	100%	0%	0%	0%	0%	100%	0%
10. Plans and designs creative, organized, effective, and appropriate lessons and units:	0%	100%	0%	0%	0%	0%	100%	0%
11. Uses appropriate informal and/or formal assessment method to evaluate:	0%	100%	0%	0%	0%	0%	100%	0%
12. Analyzes own performance and seeks sources of improvement:	0%	0%	100%	0%	0%	0%	100%	0%
13. Maintains professional conduct-punctuality, interaction with others, preparedness, and initiative:	0%	0%	100%	0%	0%	0%	100%	0%
14. Established								

effective relationships with parents, participates in school and community projects:	0%	0%	100%	0%	0%	0%	100%	0%
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Evaluations at both mid and end student teaching show that the candidate is proficient in creating a safe and engaging learning environment.

Student Work Samples

Samples of examinations are included in the Hard Copy Exhibits.

13010.9, 13020.9, 13035.9, 13045.9, 13047.9, 13050.9 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.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

[T&L 400 Methods and Materials- Science:](#) Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

Students enrolled in T&L 400 are required to become members of the National Science Teachers Association in order to receive either the journal "Science Scope" or "The Science Teacher" and the NSTA quarterly newspaper, and have access to professional conference information. Students in T&L 400 discuss NSTA journal articles and NSTA newspaper articles that included recent legislation and trends in science education, and these are all discussed in class at great length. The membership in NSTA is in lieu of a textbook for the class as the documents that come with membership provide in-depth reviews of current trends and legislation related to science education. In addition students carry out extensive discussion of their Field Experience (T&L 486) and complete an evaluation of the Laboratory Safety in their schools and make a list of observations in their assigned Field Experience school laboratories and materials (books and equipment) and curriculum.

Assessments

- a. Course Grades
- b. Student Teaching Evaluations

Results

a. Course Grades

Fall 06 & Fall 07 Methods and Materials - Science					
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

b. Student Teaching Evaluation

	Mid Term N=1				Final N=1			
Composite Science Fall 06-Spring 07	Deficient	Developin g	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
1. Demonstrates knowledge of content:	0%	100%	0%	0%	0%	0%	100%	0%
2. Demonstrates knowledge of human development through appropriate interaction, activities & attitude:	0%	100%	0%	0%	0%	0%	100%	0%
3. Recognizes individual differences and gives opportunities for diverse learners to learn:	0%	100%	0%	0%	0%	0%	100%	0%
4. Employs diverse teaching strategies:	0%	100%	0%	0%	0%	0%	100%	0%
5. Demonstrates competence in employing appropriate technology:	0%	100%	0%	0%	0%	0%	100%	0%
6. Fosters a safe, compassionate, and respectful educational environment that promotes learning:	0%	100%	0%	0%	0%	0%	100%	0%
7. Guides student behavior effectively and appropriately:	0%	100%	0%	0%	0%	0%	100%	0%
8. Express ideas articulately in written and oral communication:	0%	100%	0%	0%	0%	0%	100%	0%

9. Solicits suggestions and feedback from other and is receptive to them:	0%	100%	0%	0%	0%	0%	100%	0%
10. Plans and designs creative, organized, effective, and appropriate lessons and units:	0%	100%	0%	0%	0%	0%	100%	0%
11. Uses appropriate informal and/or formal assessment method to evaluate:	0%	100%	0%	0%	0%	0%	100%	0%
12. Analyzes own performance and seeks sources of improvement:	0%	0%	100%	0%	0%	0%	100%	0%
13. Maintains professional conduct-punctuality, interaction with others, preparedness, and initiative:	0%	0%	100%	0%	0%	0%	100%	0%
14. Established effective relationships with parents, participates in school and community projects:	0%	0%	100%	0%	0%	0%	100%	0%

Evaluations at both mid and end student teaching show that the candidate is proficient in establishing positive relationships with community members.

Student Work Samples

T&L 400 work samples are available in the Hard Copy exhibits.

13010.10, 13020.10, 13035.10, 13045.10, 13047.10, 13050.10 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.

List course number, title and description and any accompanying activities or experiences in which students engage to meet the standard.

T&L 400 Methods and Materials- Science: Through a partnership with departments in the College of Arts and Sciences and the College of Business, candidates may seek secondary licensure in several areas. Requirements may vary depending upon the field of study, so candidates are advised to keep in close and regular contact with academic advisers from both Teaching and Learning and their academic discipline. Secondary education degrees are offered in science and social studies.

Students learn about and use current Vernier and Texas Instruments Computer Based Laboratory technology to gather real time data in experiments. They learn to use Global Positioning Systems and ARCVIEW Geographic Information Systems Software to track sampling sites in data gathering. They learn to use i-movie to film student performance in classroom and testing for the purpose of analysis of student science skills. They learn to use standard laboratory equipment for a variety of tasks including demonstrations, performance tests, and science skill evaluation. They use video cameras to record and analyze assessment procedures.

Assessments

a. Course Grades

Results

a. Course Grades

Fall 06 & Fall 07		Methods and Materials - Science			
T&L 400	A	B	C	D	F
N=12	12/100%	—	—	—	—

Student Work Samples

Samples of Student designed Performance Based Examination is included in the form of an i-movie on CDs available in the Hard Copy exhibits.

13010.11

Candidate assessment data are regularly and systematically collected, compiled, aggregated, summarized, and analyzed to improve candidate performance, program quality, and program operations. The program disaggregates candidate assessment data when candidates are in alternate route, off-campus, and distance learning programs.

Teaching & Learning Undergraduate Assessment Plan

Data Collection. Data are collected at transition points throughout the program to assess candidate performance, program quality and program operations. The Teaching and Learning Undergraduate Assessment Committee (UGAC) develops an annual schedule for the purposes of data collection. T&L undergraduate faculty who assess critical tasks, staff in the Office of

Advising and Admissions and staff in the Office of Field Experience are responsible for submitting data presented in the table below. The UGAC monitors the collection process and follows up in a timely manner when data is missing.

Data Analysis and Reporting. The UGAC is responsible for submitting an annual report to the undergraduate faculty in the Department of Teaching and Learning, the Chair of Teaching and Learning and the Associate Dean for Teacher Education (NCATE Coordinator) based upon a detailed analysis of data collected over the course of the previous year. The Assessment Committee facilitates an annual Assessment Retreat. Faculty discuss the report at the departmental and individual program level and develop a written plan of action designed to address areas of weakness. Should no areas of weakness be found, a written record of faculty discussion leading to this conclusion is created. In between assessment retreats, the UGAC monitors progress in the implementation of the action plan(s). In subsequent retreats, the action plans are revisited and revised in light of the new round of data analysis.

Unit Assessment System for the Elementary Education Program

Initial Programs Undergraduate	Upon Admission to Teacher Education	Before Entering Student Teaching	Before Program Completion	After Completion
<ul style="list-style-type: none"> • Elementary • ECE/Elementary • Elementary/Middle 	<ul style="list-style-type: none"> • GPA • PPST Score • Letter of Application • Dispositions 	<ul style="list-style-type: none"> • Critical Tasks (Child Study, Multicultural Teaching, Lesson Plan, Beliefs and Practices Statement) • Praxis II Tests • Dispositions 	<ul style="list-style-type: none"> • Critical Tasks (Mid-term Evaluation, Final Evaluation) • Dispositions 	Assessments: <ul style="list-style-type: none"> • Graduate Surveys • Principal Surveys

II. Multicultural/Native American /Diversity Standard

The program requires the study of multicultural education including Native American studies and strategies for teaching and assessing diverse learners.

This response is prepared for all programs approved by ESPB. If you are reviewing an undergraduate or initial program only, please read the sections of this response headed *Initial Programs*. For Advanced or Professional Programs, please read the sections of this response headed *Advanced Programs*. Syllabi, vita and cited electronic work samples referred to in the report may be found in the folder labeled “MC-Diversity Standard.”

MULTICULTURAL EDUCATION/NATIVE AMERICAN STUDY

Initial Programs

Opportunity to Address/Meet Standard

T&L 433: Multicultural Education: All candidates in the Teacher Education Program at the University of North Dakota are required to complete this course (There is also a correspondence course with the same prefix and title which is offered to those who are in non-UND programs. Rarely, an exception is made for a candidate in the program who is unable to take the on-campus course.)

Course Description

This class takes an anthropological view of multicultural education. It will help students better understand students in culturally diverse classrooms as well as prepare them to teach about cultural diversity. This class examines several cultures but is particularly interested in American Indians of North Dakota. Those original groups include: Lakota, Dakota, and Nakota, Chippewa, and the three affiliated tribes: Mandan, Hidatsa, and Arikara (see attached sample syllabus [TL 433](#)).

Assessments/Results

1. Critical Task: Multicultural Teaching is submitted and assessed in LiveText, an on-line data management system. This Critical Task is a research paper based upon an issue in multicultural education. The paper includes a lesson plan which is assessed to determine candidates' ability to apply what they have learned related to diversity. The task was piloted in the spring of 2007 and assessed formally for the first time in the fall of 2007.

Initial Programs Critical Task Assessment Results for Multi-Cultural Teaching

Fall 2007 N=90

Teaching & Learning Standards	Does Not Meet	Fulfills Expectations	Exceeds Expectations
1.2 Teacher candidate uses tools of inquiry to develop content knowledge.	13%	56%	30%
1.3 Teacher candidate selects content to encourage diverse perspectives.	13%	53%	33%
6.2 Teacher candidate uses language to promote learning (e.g., use questioning skills, discussion techniques, delivery style,	14%	56%	29%

nonverbal cues).

6.3 Teacher candidate uses media and technology as effective learning and communication tools.

13%

36%

30%

6.6 Teacher candidate's communication skills facilitate partnerships with students, families and colleagues.

15%

52%

32%

Standards 1.3 and 6.6 especially target candidates knowledge and dispositions related to diversity. As indicate in the table 84%-86% of candidates meet or exceed expectations in these categories.

2. Mid-Term Showcase: Candidates work in pairs to create a showcase of a culture that includes engaging hands on learning activities.

Fall 2007 Multicultural Ed					
TL433: Section 1: Midterm Showcase Scores	A	B	C	D	F
N = 30	# 30 100%	0%	0%	0%	0%

3. Native American Reservation Field Trip: The class participates in a field trip, to an American Indian reservation school K-12. Each candidate is expected to write a 3-5 page paper reflecting on the field experience. At a minimum, the student should provide answers to the following questions after the field experience: (a) What does education and learning experiences mean to these students; (b) Is the educational system ensuring that the diverse needs of those students are met?

The field trip reflection assessment rubric covers three areas:

- (a) Focus (i.e. relevant, specific and clear response to the above questions....10 points);
- (b) Perspective (i.e. the student reflects on the field trip from a diverse/multiple perspective...10 points);
- (c) Language/Grammar (i.e., the students uses appropriate diversity terminology/ language as well as correct grammar...5 points).

TL 433 Section 1:Fall 2007	A	B	C	D
Field Trip Reflection Scores (N=30)	#26 87%	#4 13%	#0	#0

Student Work Samples

1. For candidate work related to the critical task (#1 above), please click on the any of the documents below:

- [Sample 1](#) Does Not Meet Expectations
- [Sample 2](#) Meets Expectations
- [Sample 3](#) Exceeds Expectations

2. A variety of student work samples related to the showcase will be available in the hard copy exhibit room.

Advanced Programs

Opportunity to Address/Meet Standard

EFR 506: Multicultural Education: Candidates who have not taken T&L 433 as undergraduates are encouraged to take this course. As described in the catalog the course is a “review of the conceptual, historical, and theoretical aspects of multicultural education. A major goal will be to provide educators with the processes for incorporating multicultural education into their own education environments to meet the needs of their culturally diverse students and to increase the cultural awareness and sensitivity of all students. North Dakota/Native American issues are primary elements of this course” (pg.249). (Also, see attached sample syllabi: [EFR 5061](#); [EFR5062](#)).

Assessments/Results:

Course Grades

Sections 1-4: SU, 2007					
Course EFR 506: Multicultural Education	A	B	C	D	F
N=28	# 26 93%	#1 3.5%	#0 %	#0 %	#1 3.5%

As indicated by the majority of A’s and B’s in the chart above, candidates taking this course met or exceeded course goals.

STRATEGIES FOR TEACHING AND ASSESSING DIVERSE LEARNERS

Initial Programs

Opportunity to Address/Meet Standard

T&L 315: Education of Exceptional Students: All candidates in our Early Childhood Education, Elementary Education and Middle Level programs are required to take this course(see attached syllabus [T&L 315](#)).

Course Description: “An orientation course, especially for classroom teachers, stressing the identification, characteristics and educational problems of exceptional children” (college catalog p.184).

TEAM Methods: Candidates in Elementary Education, Early Childhood Education and Middle Level Education take a series of methods related courses that require them to demonstrate an ability to accommodate instruction for students with special needs. Initially, candidates are presented with a case of a virtual student. They view a video and review an IEP and create a lesson plan with accommodations for this student ([see IEP of Nathan](#)). Next, candidates complete a 60-hour field experience. They select a lesson for assessment that includes accommodations for one or more students in their field experience setting.

Integration of Special Needs: The secondary education program has developed an integrated approach to guide candidates' knowledge about and skill in teaching diverse learners (see [Integration of Special Needs within the Secondary Education Program](#) document).

Assessments/Results
Course Grades

Fall 06 - Spring 07					
Course TL 315: Education of Exceptional Students	A	B	C	D	F
N=197	#148 75%	#34 18%	#7 3%	#4 2%	#4 2%

Over 93% of candidates from spring 2006 to fall of 2007 met or exceeded expectations related to the content of TL315 as demonstrated by the percent of A's and B's awarded.

TEAM Methods: Candidates development and implement a lesson plan and during the 60 hour field experience tied to the methods semester that is submitted and assessed in LiveText, an on-line data management system. INTASC Standard 3 and Program Standard 3.1 are assessed to determine candidates' abilities to accommodate all learners needs. Results from fall 2006-spring 2007 are presented in the table below:

Standard: 3.2 TAAL INTASC 3 Teacher candidate plans and adapts instruction for individual needs	Not Met	Met	Exceeds
Fall 2006	6.4%	70.2%	23.4%
Spring 2007	13.8%	74.2%	12%

During the 2006-2007 academic year 87.2%-94.6% of candidates met or exceeded the standard related to adapting instruction. The faculty reviewed data in May of 2007 and were disappointed in the lower results in the spring semester. It was at this point that the case of Nathan was developed for implementation in the fall of 2007. We hope to see improvements during the 07-08 academic year.

Integration of Special Needs: Candidates development and implement a lesson plan and during the 60 hour field experience tied to the methods semester that is submitted and assessed in LiveText, an on-line data management system. INTASC Standard 3 and Program Standard 3.1 are assessed to determine candidates' abilities to accommodate all learners needs. The Lesson Plan for secondary programs is submitted and scored only in the fall since this is when the methods courses are offered. At the time of this report, no results are available. Results for fall 2007 will be available in the spring of 2008.

Student Teaching Evaluations: Mid-term and final evaluations during the student teaching semester provide additional evidence that candidates in all of our programs address the needs of diverse learners in their classrooms. Cooperating Teachers and University Supervisors complete these evaluations at mid and end term during the student

teaching semester. The results for candidates' in the area of exceptionalities in the fall 2006 and spring 2007 are presented in the table below:

INTASC Standard 3: Teacher candidate plans and adapts instruction for individual needs								
	Mid Term N = 86				Final N =86			
Fall 06-Spring 07	Deficient	Developing	Proficient	Not Observed	Deficient	Developing	Proficient	Not Observed
All Programs	0%	30%	58%	12%	0%	10%	75%	15%

As noted in the evaluations 85%-88% of candidates during student teaching are able to adequately address this standard. In addition, 20% of candidates moved from the developing to proficient category by the end of the their student teaching assignment.

Advanced Programs

Opportunity to Address/Meet Standard

EFR 506: Multicultural Education: Candidates who have not taken T&L 433 as undergraduates are encouraged to take this course. The emphasis of the course may vary dependent upon the semester. For example, in the summer of 2007 one section of EFR 506 emphasized issues in special education within the context of the multicultural framework (see syllabus [EFR 506](#)).

Assessment /Analysis

Course Grades

Course	A	B	C	D	F
EFR 506: Multicultural Education: Sec3: SU, 2007 N=14	#12 86%	#1 7%	# 0%	# 0%	#1 7%

As indicated by the majority of A's and B's in the chart above, candidates taking this course met or exceeded course goals.

Other important diversity aspects are part of the curriculum in the required courses of [EFR 500](#): Philosophical Foundations of Education, [TL 540](#): Philosophies and Theories of Curriculum, and [TL 542](#): Models of Teaching. In addition, the candidate is required to take an additional three credits of foundations. Typically, they are advised to take [EFR 505](#): Social Foundations of Education or [EFR 507](#) Gender and Education; in either of these latter two courses, candidates study multicultural education, diversity education, and socioeconomic aspects related to access, equality, and equity.

TL 590 ST: Children's Literature in the Classroom. In this course, candidates in the reading specialist and elementary education advanced programs read multicultural literature and critique literature used in classrooms to determine its resonance with all students. Further, students complete projects which explore Native American Literature. The syllabus for [TL590ST](#) states the following goal:

- Expand your knowledge of the wealth of literature available for diverse children in classrooms (NBPTS #2)

The goal is met through reading and discussing articles and children's literature and by assignments. Sample readings and assignments are provided to illustrate candidate experiences.

Sample articles on diverse learners (cultural, racial, gender, socioeconomic)

- Enteneman, J., Murnen, T. J., & Hendricks, C. (2005). Victims, bullies, and bystanders in K-3 literature. *The Reading Teacher*, 59, pp. 352-364.
- Livingston, N. & Kurkjian, C. (2005). Circles and celebrations: Learning about other cultures through literature. *The Reading Teacher*, 58, pp. 696-703.
- Louie, B. L. Guiding principles for teaching multicultural literature. *The Reading Teacher*, 59, pp. 438-448.
- Wason-Ellam, L. (1997). "If only I was like Barbie." *Language Arts*, 74(6), pp. 430-437.
- Yenika-Agbaw, V. (1997). Taking children's literature seriously: Reading for pleasure and social change. *Language Arts*, 74(6), pp. 446-453.

Multicultural and gender-based literature assigned for the course and read by candidates:

- Curtis, C. P. (1995). *The Watsons Go To Birmingham*. Yearling. ISBN: 0440414121
- DiCamillo, K. (2000). *Because of Winn-Dixie*. Scholastic. ISBN: 043925051X
- Erdrich, L. (1999). *The Birchbark House*. Scholastic. ISBN: 0439203406
- Munsch, R. (1980). *The Paper Bag Princess*. Annick Press. ISBN: 0920236162
- Ryan, P. M. (2000). *Esperanza Rising*. Scholastic.

Artifacts supplied to illustrate multicultural course experiences are listed here and supplied for perusal.

- PowerPoint by candidate—[Contemporary Native Americans and Literature](#)
- Character Comparison between Esperanza in *Esperanza Rising* and Opal in *Because of Winn-Dixie*
- Key Discussant Grade Report on *Birchbark House* with bibliography of Native America book resources and teaching ideas
- [Multicultural Book Analysis](#)

TL 590 ST: Writing in the Elementary School Classroom. In part this course is designed to increase candidates' ability to effectively teach diverse children to write, respecting development, culture, gender, and individuality. Though meeting a goal such as this is integrated throughout the semester, specific course readings and activities are devoted to the goal. Readings on gender and writing, specifically paying attention to boys, and culturally conscious writing instruction is also addressed. Multicultural and gender-based readings include the following:

- Dworin, J. E. (2006). The family stories project: Using funds of knowledge for writing. *The Reading Teacher*, 59(6), 510-520.
- Dyson, A. H. (1998). Fold processes and media creatures: Reflections on popular culture for educators. *The Reading Teacher*, 51(5), 392-402.
- Fletcher, R. (2006). Boy writers: Reclaiming their voices. (Chapter 10). Portland, ME: Stenhouse Publishers.
- Fu, D. & Shelton, N.R. (2007). Including students with special needs in a writing workshop. *Language Arts*, 84(4), 325-336.

- Newkirk, T. (2000). Misreading masculinity: Speculations on the great gender gap in writing. *Language Arts*, 77(4), 294-300.
- Rubin, R. & Carlan, V. G. (2005). Using writing to understand bilingual children's literacy development. *The Reading Teacher*, 58(8), 728-739.

One artifact supplied to illustrate linguistic/cultural study of writers is a whole class effort to identify ways to support ELLs in the writing classroom. Candidates reviewed numerous books and articles, identified resources, and gleaned specific practical ideas for supporting young writers. The series of charts that evolved from that activity are supplied as an example of the type of learning event that is integrated in the course to learn about supporting multicultural learners in writing.

Programs for Other School Professionals

In addition to the instruction and assessment in the above programs, the following coursework in Educational Leadership and School Counseling attend to multicultural and diversity issues.

Educational Leadership:

Opportunity to Address/Meet Standard: Courses

[EDL 514](#): Personnel, Supervision, and Staff Development: Various in-depth discussions regarding diversity occur (e.g., Native American and the BIA system). [EDL 516](#) Policy and Educational Finance: Candidates conduct research on various schools, locations, and issues. An example of a research project may be an exploration of the funding for a Native American school.

[EDL 519](#): The Principalship: Principals from various schools (including Indian Reservations) discuss the complexity of education and how it affects students, teachers, and communities.

[EDL 501](#): Leadership, Planning, and Organizational Behavior: Studies include shaping school culture, addressing individual and group needs, setting goals and priorities according to the context of the community.

[EDL 511](#): Personal Communications and Ethics: Discussions are held on how culture, age, and socioeconomics influences education.

Assessments Include:

Exams
Research Papers
Portfolios

School Counseling:

Opportunity to Address/Meet Standard: Courses

[Coun 518](#): Group Theory and Process: Addresses the principles and practices of support, task, psycho-educational, and therapeutic groups with various populations in a multicultural context. Includes study of professional issues relevant to group processes, involves participation and leading group experiences.

[Coun 531](#): Psychology of Women, Gender, and Development: This course presents current research and trends in developmental theory, particularly theories pertaining to psychological development of women and men. Issues such as abuse, ageism, depression, eating disorders, emotional experience and expression, heterosexism, feminism, and multiculturalism will be examined as related to the practice of psychology. Learning methods include writing, music, film, group discussion and creative projects.

[Coun 532](#): Multicultural Counseling: “This course offers an introduction to counseling theories and interventions appropriate for American ethnic and non-ethnic minority clients. The values suppositions of various cultural groups will be examined”(college catalog p. 24).

Assessments Include:

Papers

Exams

Presentations

Counselor Preparation Comprehensive Examination (CPCE)

Student Internship Evaluation Forms



CURRICULUM EXHIBIT FORM BASIC PROGRAM
EDUCATION STANDARDS AND PRACTICES BOARD
 SFN 14381 (05-06)



Institution: University of North Dakota		Major: Composite Science
Credits are: Semester		
Credits required for degree: 125		
General Studies	Teaching Specialty	Professional Education
Must total at least 39 credits	Credits required: 72-73	Total credits: 37-38
<u>Behavioral Sciences (9 Min)</u> Electives in at least 2 areas from the following departments: Anthropology, A&S, Communication, CSD, Economics, Geography, History, Honors, Humanities, Indian Studies, Music, Nursing, Nutrition, Political Science, Psychology, Recreation and Leisure, Rehab Services, Sociology, Social work, Space Studies, T&L. 9 credits Total <u>Humanities (9 Min)</u> Electives from at least 2 areas in the following departments: Art, EHD, English, Fine Arts, History, honors, Indian Studies, IT, Languages, Music, Philosophy, Political Science, Religion and Theater Arts. 9 credits Total <u>Natural Sciences (9 Min)</u> Electives in at least 2 areas and 1 lab science from the following departments: Anthropology, Atmospheric Sci, Biology, Chemistry, Computer, Sci, Economics, Geography, Geology, Honors, Humanities, IT, Mathematics, Nutr and Dietetics, Philosophy, Physics, Psychology, Sociology and Space Studies 9 credits Total <u>Symbolic Systems (9 Min)</u> Engl 110 Composition (3) Engl 120 Composition (3) Comm 110 Public Speaking (3)	<u>Biology 14-15 Units</u> Biol 150,151 Gen Biology I & II (6) Biol 150L,151L Gen Biol Lab (2) Biol 312 Evolution (3) Biol 332 & 332L Gen Ecology & Lab Or Biol 336 Systematic Botany Or Biol 315 Genetics (3-4) <u>Chemistry 12 Units</u> Chem 121/121L, 122/122L Gen Chemistry I&II & Labs (8) Chem 333 Intro to environmental, Clinical & Forensic Analysis (4) <u>Physics 12 Units</u> <u>Option 1</u> Phys 251 & 251L University Physics I & Lab (4) Phys 252 & 252L University Physics II & Lab (4) Phys 253 & 253 L University Physics III & Lab (4) <u>Option 2</u> Phys 211 & 211L College Physics I and Lab (Biology Emphasis) (4) Phys 212 & 212L College Physics II And Lab (4) Phys 492 special Problems or any 4 units of Physics with Dept. Approval (4) <u>Earth Science 12 Units</u> Geog 121 & 121L Physical Geography and Lab OR Geog 134 & 134L Intro to Global Climate and Lab (4) Geol 101 & 101L Intro to Geology &	T&L 325 Exploring Teaching in Secondary Schools (3) T&L 345 Curriculum Development (3) T&L 350 Dev & Ed of Adolescent (3) T&L 386 Field Experience (Optional 1) T&L 390 School Lab Safety (1) T&L 400: Science Methods & Materials (3) T&L 433 Multicultural Ed (3) T&L 460 Micro Teaching (3) T&L 486 Field Experience (1) T&L 487 Senior Seminar (1) T&L 486 Student Teaching (16)

OR Engl 125 OR Advanced Composition Course 9 credits Total	Lab OR Geol 102 & 102L The Earth Through Time & Lab (4) Phys 110 & 110L Intro to Astronomy & Lab (4) <u>Mathematics 11 Units</u> Math 165 Calculus I (4) Math 166 Calculus II (4) Statistics (3) Additional Courses to fulfill 24 units requirement in one Science Area (9-10 Biology or 12 Chemistry or 12 Physics or 12 Earth Science (Minor is recommended)	
39 Total	72-73 Total	37-38 Total

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.